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YUN-NAN

THE LINK BETWEEN INDIA AND THE YANGTZE

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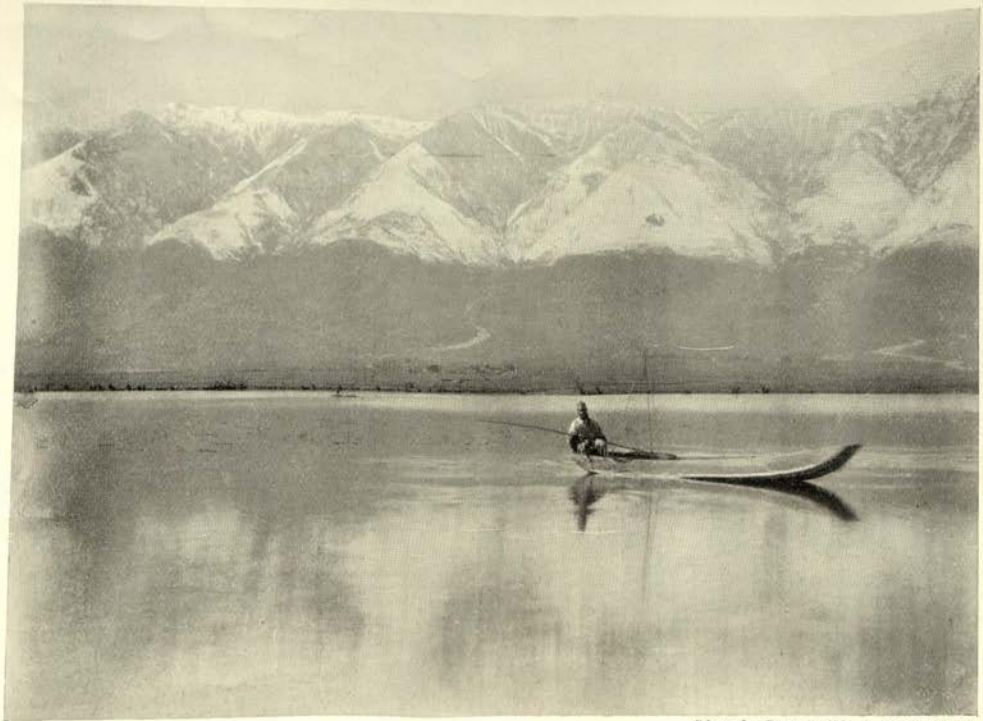

Photo by Captain W. A. Watts-Jones

The lake and mountains of Ta-li Fu

YUN-NAN

THE LINK BETWEEN INDIA AND THE YANGTZE

by

MAJOR H. R. DAVIES

52nd Oxfordshire Light Infantry

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PREFACE

IN this work it has been my endeavour to write something that may be useful to the future traveller, and to those who are interested in the subject of through communication between India and China, and in the development of our trade in the latter country. I cannot claim that the book contains a number of amusing incidents or a thrilling narrative of adventure.

In the first three chapters I have considered, in a general manner, the subject of railway construction between India and the Yangtze, leaving to the Appendix a more detailed description of the proposed line, and some chapters on the nature and products of the country through which such a line would pass. In writing about the proposed railway, and in fact on all other subjects touched on in this book, the opinions expressed are merely my own personal view of the matter, and do not in any way represent the ideas of any department of the Government.

The main part of the book is taken up with an account of my own travels in Yün-nan and the neighbouring provinces. Of the 5,500 miles of road which I covered, almost exactly half was ground previously untrodden even by missionaries, while much of the remainder has not been previously described. This I have considered sufficient excuse for attempting to give some information which may be of value to the geographer and to the future traveller. Possibly, too, more may be learnt of the condition of a country from a narrative of travel than from the perusal of such details as are given in the Appendix.

It will, perhaps, be noticed that my first journey was undertaken as long ago as 1894, and that my most recent travels in Western China were in 1900. It may, therefore, be objected that my information is too old to be of value. I do not think, however, that this will be found to be the case to any extent. The railway now being constructed by the French will doubtless introduce changes in the country it touches, but so far Yün-nan has been little affected by modern ideas, and the greater part of my routes have not since been traversed by any other traveller.

In Appendix VIII. will be found some account of the various tribes of Western China. Here I have in some places repeated what has already been said in the body of the book, for I have thought it best to make this as complete an account as I was able to give, so that those interested in the subject would not have to turn to other parts of the book.

I would call special attention to the map which will be found in the pocket of the cover. I have spent much time in its compilation and believe that it contains *everything* of value that has ever been published of that part of the country. A special note on its value and its limitations will be found in Appendix IX.

Though the actual account of travels is necessarily confined to the country which I saw myself, much of the more general information concerning the projected railway and the products of the province, and much of the material for the map, are the result of the labours of my companions, whose names will be found mentioned in the following pages. Our united journeys, not counting roads which we traversed twice, covered a distance of nearly 15,000 miles of land travelling.

In writing on the subject of the Yün-nan Railway I feel that I am only very indifferently carrying out a task which would naturally have been performed by Captain W. A. Watts-Jones, R.E., had not an untimely death cut short

a most promising career. This officer had seen the country from both sides and was specially qualified to give an authoritative opinion, but no final report was ever received from him, for on his second journey he was murdered by Boxers. Besides the personal loss to those of us who worked with him, his early death has removed one who had already become an authority on railway questions in China.

The credit for the increase to our geographical knowledge of Western China which has resulted from our expeditions is due primarily to the Government of India and the Yün-nan Company. The former were entirely responsible for one expedition, and gave much help in the loan of surveyors, &c., in the two expeditions which were carried out by the enterprise of the Yün-nan Company.

My thanks are specially due to Captain C. G. W. Hunter, R.E., for his valuable assistance in the parts of this book which deal with railway questions. I am also much indebted to the War Office for permission to use the map of Yün-nan which accompanies this book. A large number of the photographs which illustrate this book are the work of the late Captain W. A. Watts-Jones, who was an excellent photographer. By the kindness of Mrs Watts-Jones I have been allowed to make use of them. My thanks are also due for leave to reproduce their photographs to Major C. H. D. Ryder, Mr J. S. Ker, Major G. C. Rigby, Major G. W. Johnson, Major M. E. Willoughby, and Captain E. W. Mahon.

H. R. DAVIES.

September 1908.

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CHAPTER I

YÜN-NAN AND ITS COMMUNICATIONS.

Situation of Yün-nan—Importance and interest of Yün-nan—Its communications.

To how many people does the name Yün-nan convey anything at all? Those who do not know in what part of the globe it is situated are ignorant in good company. For a distinguished official wishing to study the question of Yün-nan railways, sent for a map of Canada! He was surprised to find that they spelt the name Yukon.

Yün-nan must be looked for not in the neighbourhood of Klondike, but in the south-west corner of China. It is a province that deserves to be better known, for it has more than one claim on the attention of Englishmen. First of all it borders the eastern frontier of our Indian Empire for several hundred miles. Secondly, if India and the Yangtze are ever connected by railway, it is through Yün-nan that the line must pass. Add to this that the south-eastern part of the province borders the French colony of Tong-king, while its north-west corner just touches Tibet, and here at once is enough to make Yün-nan interesting politically and commercially.

But it is not only to the statesman and the merchant that Yün-nan will appeal. For the geographer and the explorer there are still many blank spaces on the map. To the geologist and the mining engineer its great mountain ranges must contain much of interest. For the ethnologist, above all, it is a wide field of research in which he might work for a lifetime and still leave much to be done by his successors. Nor has any systematic examination of the zoology or botany of the province as yet been made. There must be much interesting work for

the naturalist in a country which includes perpetual snows, temperate plateaus, and tropical forests.

Some of these subjects are touched on in the account of journeys through the province which forms the main part of this volume. But in the next few chapters it is with the question of railway communication with Yün-nan that I propose to deal.

The shape and size of the province can best be seen by a reference to the map which will be found in the pocket of the cover at the end of this book. Its position with reference to other countries and provinces can also be seen on the small inset map which accompanies this.

Yün-nan is not in itself a poor country, but it suffers from want of communications. The mountainous nature of the province makes the large rivers so full of rapids and boulders that they cannot be navigated, and the roads so difficult that quick land travelling is also impossible. There is no river in the interior of Yün-nan that is of any practical use for boats, much less for steamers, while the roads are merely mountain paths fit for no transport but pack mules and ponies. Moreover the distances from sea ports and even from navigable rivers are very great.

There are four main routes by which goods can reach Yün-nan.

(1) Up the Irrawaddy by steamer to Bhamo (lat. 24° 15′, long. 97° 15′) in the north of Burma, two days from the Yün-nan frontier.

(2) Through Tong-king by rail, from Haiphong to Lao-kai (lat. 22° 30′, long. 103° 57′) which is on the border of Yün-nan. This line is now being carried on by the French through Mêng-tzŭ to Yün-nan Fu and will soon be opened to Mêng-tzŭ.

(3) Up the West River from Canton by steamer and boat to Pai-sê T'ing[1] (lat. 23° 55′, long. 106°) in Kuang-hsi province, one day from the border of Yün-nan.

(4) Up the Yangtze by steamer to I-ch'ang and thence by boat to Sui Fu (lat. 28° 45′, long. 104° 35′), three days from the Yün-nan boundary.

Let us now take two places—Yün-nan Fu, the capital of the province (lat. 25°, long. 102° 45′), and Hsia-kuan near

[1] Also pronounced Pê-sê or Po-sê.

Photo by Captain W. A. Watts-Jones

A Yün-nan pack mule

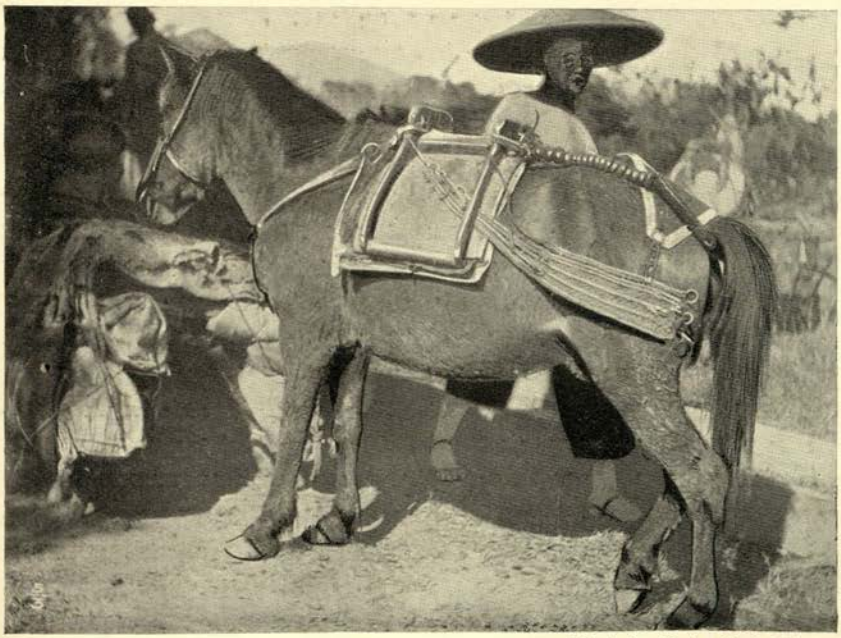


Photo by Major G. C. Rigby

A Yün-nan pack mule and load

Ta-li Fu, the centre of the richest part of Yün-nan (lat. 25° 35′, long. 100° 10′), and see how far they are situated from the nearest navigable river.

Yün-nan Fu is 505 miles from Bhamo, 240 miles from Lao-kai, 355 miles from Pai-sê T'ing, and 398 miles from Sui Fu.

Hsia-kuan is 280 miles from Bhamo, 467 miles from Lao-kai, 575 miles from Pai-sê T'ing, and 618 miles from Sui Fu.

Over these distances it must be remembered everything has to be carried on the backs of animals or men.

Moreover the four places to which navigation is possible by these four different river routes are of themselves quite unimportant. All merchandise from abroad has naturally to come from the sea ports, and the length of time occupied in carriage from the sea ports adds to the inaccessibility of Yün-nan to foreign goods.

Lao-kai, 1½ days by train from Haiphong is the best off in this respect. Bhamo comes next in point of nearness to the sea, being three days from Rangoon by train and steamer.

Pai-sê T'ing and Sui Fu are both situated at a great distance from the sea and the long up-river journey takes roughly speaking quite a month and a half from Canton and Shanghai respectively.

Taking again the two towns of Yün-nan Fu and Hsia-kuan and measuring the distance roughly in time we find that Yün-nan Fu is 39 to 46 days from Rangoon, 16 days from Haiphong, 67 days from Canton, and 70 days from Shanghai. Hsia-kuan is 24 to 31 days from Rangoon, 28 days from Haiphong, 82 days from Canton, and 85 days from Shanghai.

Here then is a province in which long distances and difficult transport make any large trade at present impossible. It is only by railways that the country can be developed. Unfortunately the same mountains which make the rivers unnavigable and the roads impassable for wheels, also render the construction of railways extremely difficult.

CHAPTER II

RAILWAY PROJECTS FROM BURMA INTO CHINA.

Captain Sprye's proposals—Opening of Bhamo to steam navigation—Baber's opinions—Colquhoun's and Hallett's project—The Shan States—The railway to Lashio.

THE idea of drawing the trade of Western China towards Burma is by no means a new one. To Captain Sprye is due the credit of being the originator of the scheme, for as long ago as 1831 he drew attention to the advantages of our position in Burma as a means of attracting to our sea ports some of the commerce of the land-locked province of Yün-nan.

In those days railways were not thought of, and it was at first only the opening of a trade route that Captain Sprye proposed. In later years he advocated a survey for a railway line from Rangoon into Siam, and thence northward to Keng Tung and Keng Hung (lat. 22°, long. 100° 50′). Captain Sprye's proposals, though they had many supporters among the higher officials in British Burma, were not approved of by the Government of India, and nothing more was undertaken than a survey of a line from Rangoon northwards to Toungoo.

The Yün-nan railway question was again revived about 1867 when it became known that the Upper Irrawaddy could be navigated by steamers as far as Bhamo. This town is situated close to the Chinese frontier and it naturally suggested itself that this would be the best route for establishing a trade with Yün-nan. The road from Bhamo to Yün-nan Fu had not been explored by Europeans since the time of Marco Polo, and it seems to have been hoped that a line for a railway might be found in this direction.

This idea was at once dispelled when the reports of Margary and Baber showed that the high mountain ranges

and deep valleys which cross the road from T'êng-yüeh T'ing to Ta-li Fu would make the route quite impracticable for a railway. Baber's remarks were in some cases so emphatic as to create among those who had not studied the subject very deeply an impression that *any* railway through Yün-nan was impossible.

Of the high range between the Salween and the Shweli he remarks, "If British trade ever adopts this track we shall be delighted and astounded in about equal proportions." In another place he says, "By piercing half a dozen Mont Cenis tunnels and erecting a few Menai bridges, the road from Burma to Yün-nan Fu could doubtless be much improved."

Allowing for the slight exaggeration which no one will grudge to a writer of Baber's talents, this description does give an idea of the difficulties of parts of this road. But these remarks were made about the road from Bhamo viâ T'êng-yüeh T'ing and Ta-li Fu to Yün-nan Fu, a line which no one now advocates as possible for a railway. If those who think Baber was therefore opposed to any railway construction in Yün-nan will look twenty lines beyond the last quotation, they will see that Baber himself suggests the very line of approach that has now been adopted[1].

About 1881 a fresh scheme, based on the proposals of Captain Sprye but differing somewhat in the line taken, was brought forward by Mr A. R. Colquhoun and Mr Holt S. Hallett. Their line was to start from Moulmein, a port which lies in Lower Burma at the mouth of the Salween. From there it was to run eastward to Raheng in Siam, and thence north up the Menam valley, and through Keng Tung and Keng Hung to Ssŭ-mao T'ing in the southern part of Yün-nan (lat. 22° 50′, long. 101°).

As far as the physical difficulties of the country are concerned, this was probably the best line that could be found, though from Ssŭ-mao onwards difficulties would begin. The principal objection to it was that it ran mainly through Siamese territory and would therefore do more to develop Siam than our own possessions. Still, as long as our rule extended only over Lower Burma, this line seemed

[1] Royal Geographical Society, *Supplementary Papers*, Vol. I, Part I, p. 185, or *Parliamentary Report*, China, No. 3 (1878).

the only means of getting communication with Western China.

The annexation of Upper Burma in 1885 changed all this. A railway had already been carried northwards from Rangoon as far as Toungoo, and by 1889 the extension to Mandalay was completed. Meanwhile the Shan States, which lie to the east of Burma and had been tributary to the Burmese king, were explored by our columns. They found here a peaceful trading population and our rule was established without any serious fighting.

The development of the Shan States then naturally engaged the attention of the Government. Surveys for a line were carried out by Mr Bagley, and the great engineering difficulties of the rise from the Irrawaddy plain were overcome. The line starting from Myohaung, a little south of Mandalay, passes through Maymyo and Thibaw to Lashio, the capital of the Northern Shan States (lat. 23°, long. 97° 45′). The railway was completed up to this point in 1902 and Lashio is still the terminus.

From here the line could easily be carried on to Möng Yaw and a survey has been made of the 75 miles which separate this place from Kun-long Ferry on the Salween (lat. 23° 25′, long. 98° 40′). Though the railway is likely to stop at Lashio for the present, it would doubtless be at once extended to Kun-long if the construction of a line through Yün-nan was undertaken.

The existence of this railway through the Shan States has much simplified the problem of communication with Yün-nan by definitely deciding the direction which such an extension should take[1]. Whatever may originally have been the merits of the proposals of Mr Colquhoun and Mr Hallett, their line cannot now compete with an extension of the Kun-long railway. From Moulmein to Ssŭ-mao T'ing is a distance of 700 miles: from Kun-long to Yün Chou (lat. 24° 30′, long. 100° 10′) is only 145 miles. Moreover Yün Chou is better placed than Ssŭ-mao for drawing the trade of Yün-nan.

[1] See, however, remarks on the projected Bhamo-T'êng-yüeh line, pp. 13—16.

CHAPTER III

THE YÜN-NAN RAILWAY.

The Yün-nan Company's expedition—Its results—The purposes of the proposed Yün-nan Railway—Its extension to Ssŭ-ch'uan—Comparison of the Yün-nan Railway with a line to Ssŭ-ch'uan from the east—A through route from India to the Yangtze—French projects—Proposed extension of the British line to Yün Chou—The proposed Bhamo-T'êng-yüeh line—Can never become a through route to the Yangtze—Favourable situation of Yün Chou—Railway construction by the Chinese.

THE original proposers of the Yün-nan Railway had in their minds simply the drawing of the trade of that province towards Burma. It was then hardly realised that beyond Yün-nan lay a far richer and more populous province—that of Ssŭ-ch'uan. The eventual object of any railway scheme now proposed must be not merely the encouragement of local trade across the Burmese frontier, but the attainment of a through route from India to Ssŭ-ch'uan and to Eastern China.

It was with this view that in 1898 the Yün-nan Company determined to send out an expedition to reconnoitre for a railway line to connect Kun-long on the Burmese border with some point on the Upper Yangtze to which boats can ascend. Of this expedition I had the good fortune to be in charge, but I do not propose in this chapter to go into details, but merely to confine myself to the general conclusions arrived at.

An account of the composition of our party and our methods of working will be found on p. 114 and pp. 120, 121 and seq., and a description of the proposed line, and details about the geography, population and commerce of Yün-nan are given in the appendices at the end of this book.

All that will be necessary here then will be to state as shortly as possible the results of our work.

1. A reconnaissance was made for a railway starting from Kun-long on the Burmese frontier and reaching the

Yangtze either at Sui Fu (lat. 28° 45′, long. 104° 35′) or at Na-ch'i Hsien (lat. 28° 45′, long. 105° 25′). [The route reconnoitred is shown on the map which accompanies this book.]

2. The total distance from Kun-long to the Yangtze is 1000 miles. The greater part of the line would traverse exceedingly difficult country, necessitating in places a grade as steep as one in 25 and possibly a few short lengths of rack. The total cost of a metre gauge line would be perhaps £15,000,000 to £20,000,000 and the time required for construction would be at least ten years.

3. Though there are great possibilities of future trade, the province of Yün-nan is, owing to bad communications, at present so little developed that the railway cannot be made as an immediately paying commercial speculation.

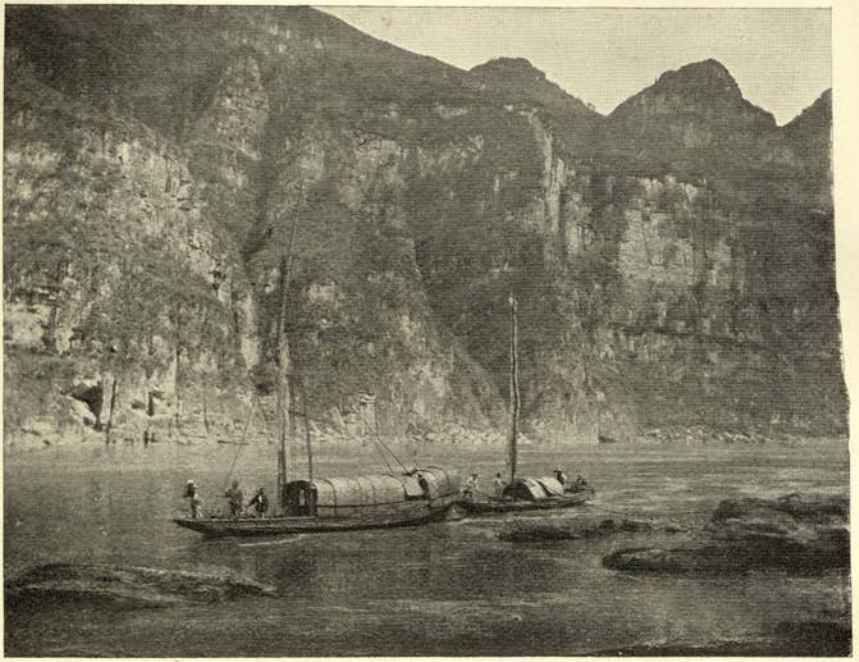
Under such circumstances commercial men are not likely to put their money into a scheme in a foreign country for which such a large sum would be required without any probability of a profit for some years. A guarantee from the British Government of even a low rate of interest would doubtless produce the necessary money. The question therefore resolves itself into this. Is it worth the while of the British Government to spend money on the construction of the whole or any part of the Yün-nan Railway?

The purposes of such a line would be twofold:

1. To draw the trade of Yün-nan towards Burma, and thereby prevent the trade of Western Yün-nan being taken from us by the French.

2. To reach the rich province of Ssŭ-ch'uan, there to connect in the future with the projected Hankow-Ch'êng-tu railway, thus forming a through route between India and Shanghai—a link in the grand trunk line which will doubtless some day connect Calais with Eastern China *viâ* India.

It will be convenient to consider first the second of these two objects. As far as the Ssŭ-ch'uan trade is concerned it does not seem likely that the Yün-nan Railway can compete in the more bulky class of goods against a line coming from the east. While the long, costly and risky boat journey up the Yangtze gorges remained the only means of bringing foreign goods into Ssŭ-ch'uan, the Yün-nan Railway might



The Yangtze gorges

Photos by Captain E. W. Mahon

The Yangtze gorges

have hoped to draw the trade of this province towards Burma. But now this state of things seems likely to come to an end, for Ssŭ-ch'uan in the course of a few years will probably be approached by a railway coming from the east.

To find a practicable line from Hankow to Ch'ung-k'ing and Ch'êng-tu has not been an easy task. Many routes were tried and found impracticable, but the perseverance of Colonel Manifold and those who worked with him[1] has overcome these difficulties, and a route has been discovered which is reported to be feasible.

Now cotton cloth and yarn are the principal imports into Ssŭ-ch'uan, and these come chiefly from Bombay. Let us therefore take Bombay as a starting-point and compare the two routes.

The approach to Ssŭ-ch'uan by the eastern line entails a somewhat long sea journey of 4,700 miles to Shanghai. But it would not always be necessary to break cargo here. For half the year large ocean-going ships can reach Hankow 600 miles up the Yangtze, and there is no season of the year when ships drawing 10 feet cannot navigate the river up to this point. Cargo could therefore be carried in sea-going ships straight from Bombay to Hankow.

From Hankow to Ch'êng-tu viâ Ch'ung-k'ing would be about 1,100 miles by rail. A direct railway from Hankow to Ch'êng-tu without touching Ch'ung-k'ing would materially shorten this distance, but as the line viâ Ch'ung-k'ing seems the more likely to be first constructed, it will be well to reckon the distance at 1,100 miles.

Taking now the Yün-nan route, the voyage by sea from Bombay to Rangoon is only 2,150 miles, but from Rangoon to Ch'êng-tu by rail would be some 1,600 miles.

Sea freights are so cheap compared to railway rates that these extra 550 miles of land travelling are likely to more than counterbalance the advantage of the shorter sea voyage. It should also be remembered that the cost of construction of the eastern line and its working expenses are likely to be less per mile than those of the Yün-nan Railway.

The construction however of the Hankow–Ch'êng-tu railway would cut both ways. Though it would probably

[1] Captain E. Barnardiston, R.E., and Captain E. W. S. Mahon, R.E.

carry a large part of the trade of Ssŭ-ch'uan, it would at the same time add greatly to the traffic on the Yün-nan Railway, for the two lines together would form the shortest route between India and Eastern China.

This brings us to the question of a through railway route from India to China. In an age when railways are penetrating to the most out-of-the-way places in the earth, it is impossible to suppose that India and China—the two most populous countries in the world—will be content to remain side by side without being connected by railway. I think I am quite safe in asserting that any such railway must pass through Yün-nan.

I do not know that any route passing further to the north, through Tibet or Chinese Turkestan, has ever been suggested. The great height of the mountains and the very long stretches of extremely poor country would, I think, make any such project impracticable. We are then driven to the conclusion that it is only through Yün-nan that India can be linked to the Yangtze and to Eastern China[1].

Now the first railway to penetrate Yün-nan will undoubtedly be the French line from Tong-king (see map)[2], which is at the present moment actually in course of construction. When the French railway has reached Yün-nan Fu, the capital of the province, it is not likely to stop there. The country between Yün-nan Fu and the navigable part of the Yangtze is so difficult that I do not suggest that this part of the line would be immediately taken in hand. But there can be little doubt that extensions would eventually take place not only to the east, but also to the west.

A Frenchman who has been recently travelling in Yün-nan on an official mission points to Ta-li Fu as the goal of a western extension of the French railway, and places the future western limit of French influence and French commerce at the Mekong (long. 99° 30′)[3]. It must be remembered too in this connection that the country between Ta-li Fu and Yün-nan Fu is on the whole less difficult for railway construction than most other parts of the province.

[1] For a discussion of some alternatives that have been proposed, see Appendix, pp. 326—329.

[2] A description of this line is given in the Appendix, pp. 330—331.

[3] *Voyage au Yünnan*, by G. Courtellemont, pp. 178 and 194.

If then we are content to postpone the idea of constructing a railway from Burma into Yün-nan, the fact has to be faced that in the meantime the French will have got possession of all that part of the future Burma-Yangtze line which lies east of Ta-li Fu, or, to put it in figures, about 700 miles out of the total of 1000 miles will be in foreign hands. Moreover the trade of even Western Yün-nan, the richest part of the province, is likely to find its way to Tong-king instead of as at present to Burma.

As the owners of the Indian Empire and the possessors of by far the largest share of the foreign trade of China, we can hardly remain indifferent spectators of the construction by foreign powers of the connecting link between these two countries, nor can we well sit still and see the trade of Western Yün-nan snatched from our very doors.

I am not alluding here to political rivalry. The break-up of China which once seemed so imminent appears likely to be altogether avoided. If in spite of appearances such a catastrophe should take place, the political influence in any particular province will naturally go to those who have spent their money and labour in developing it.

But it is not on political grounds that I would base arguments in favour of the Yün-nan Railway. The construction by the French of their line from Tong-king to Yün-nan Fu and its subsequent extension both to the east and to the west are matters of most legitimate commercial enterprise. The most difficult part of the Yün-nan Railway would be that which lies between Yün-nan Fu and the Yangtze, and here, it must be remembered, the French are in no better a position than ourselves. Here both nations have to face the same difficulties. The French Government have not hesitated to give their support both moral and financial to the undertaking. If the British Government decline to follow this example, they must also be prepared to lose in the future the advantages of such a policy.

It is not my intention to pose as an adviser of the Government, but merely to state the facts. The Foreign Office have all the threads in their hands, and can best judge whether the expense would be justified by the end.

I would however remark that there is a middle course

which I believe would be the best to adopt. I do not think that it would be necessary, or even desirable, that the whole line from the Burmese frontier to the Yangtze should be undertaken at once. Such a project is too vast to be carried through in any way but by gradual stages.

My suggestion is that for the present the Burma railway should be extended from Lashio to Kun-long, and the Yün-nan Railway constructed from Kun-long to Yün Chou.

This town could be reached in about 145 miles from Kun-long at a cost of about £1,500,000 to £2,000,000. It is the commercial centre of a district which suffers much from want of communications with good markets. An extension of our railway system to Yün Chou will bring within range of Burma many parts of Yün-nan hitherto inaccessible, and will materially shorten the distance to places which already trade with us.

At present nearly all our trade with Yün-nan comes through Bhamo. The following table gives the comparative distances from Bhamo and from Yün Chou to different places in Yün-nan.

	To Bhamo	To Yün Chou
From T'êng-yüeh T'ing	112	161
„ Yung-ch'ang Fu	173	100
„ Hsia-kuan (near Ta-li Fu)	271	109
„ Ch'u-hsiung Fu	394	232
„ Yün-nan Fu	491	329
„ Ssŭ-mao T'ing	434	185

But the improvement of the trade between Burma and Yün-nan would be only one object of this extension to Yün Chou. It would also be the first step in the joining by railway of India with Shanghai. Having thus given an earnest of our intention to connect Burma with Yün-nan Fu we should be in a position to enter into negotiation with the French for a joint construction of that part of the line which would join Yün-nan Fu to the Yangtze.

To come now to the question of the trade of Yün-nan. The most prosperous part of the province is that which comprises the series of fine plains which lie to the north, the east, and the south of Ta-li Fu (lat. 25° 42′, long. 100° 10′).

The commercial centre of this region is Hsia-kuan, which lies eight miles south of Ta-li Fu. All this country and even places considerably to the east of this are at present supplied from Burma, for from Hsia-kuan to Lao-kai on the Tong-king border is considerably further than from Hsia-kuan to Bhamo.

When the French railway is completed from Tong-king to Yün-nan Fu while the Burma railway terminus is still at Lashio, this advantage will disappear. For from Hsia-kuan to Bhamo is 280 miles against 220 miles from Hsia-kuan to Yün-nan Fu. I have taken Hsia-kuan as an instance, but naturally with the trade of Hsia-kuan would also vanish that of other similarly situated places which lie nearer to Yün-nan Fu than to Bhamo or Lashio.

If we sit still and do nothing we shall therefore lose the trade of a great part of even Western Yün-nan. But if we construct our railway even as far as Yün Chou, we shall easily retain this, for from Hsia-kuan to Yün-nan Fu the French terminus is 220 miles, and from Hsia-kuan to Yün Chou 109 miles.

There is however another railway project which must be noticed here—the proposed line from Bhamo to T'êng-yüeh (Momien) (lat. 25°, long. 98° 30′). A survey of this route has been made: the distance by the line that a railway would follow is 122 miles and the approximate cost is estimated at less than a million pounds[1].

Though there is no railway at present at Bhamo, this place is connected by river steamers with Rangoon and with the railway system of Burma at Katha, and would thus form a suitable starting-point for a railway into Yün-nan. It is moreover by the Bhamo route that most of the present trade between Yün-nan and Burma is carried on, and the line would thus have the advantage of following a well-established trade route.

The construction of a railway between Bhamo and T'êng-yüeh would be comparatively speaking an easy and cheap undertaking, and it would doubtless pay after a time.

[1] These are only preliminary estimates. The results of the final survey are not yet published.

Taken by itself it would be a most useful line, but before committing ourselves to its construction and the abandonment of the Kun-long–Yün Chou route it is essential to ascertain whether an extension eastward to Hsia-kuan is possible.

In the north-east corner of the T'êng-yüeh plain there is a gap in the hills through which the line could probably reach the Shweli valley, but the high steep mountain chain that divides the Shweli from the Salween, and beyond this the valley of the Mekong running between wall-like ranges of hills, are likely to prove extremely difficult obstacles to the further progress of a railway. It would not however be safe to pronounce these obstacles insurmountable until the results of further reconnaissances of this country are made public.

A line to T'êng-yüeh only (if extension eastward proves impossible) not only does not get us any further in the joining of India and Eastern China, but it is extremely doubtful if it would be effective in retaining for us the trade of Hsia-kuan, a place which I have already mentioned as the most important commercial centre in Yün-nan. The distance from T'êng-yüeh to Hsia-kuan is 159 miles and from Yün-nan Fu to Hsia-kuan 220 miles. The balance of 61 miles is perhaps enough to ensure the retention of this trade for the present, but it must be borne in mind that the French by extending their line westward can bring the advantage in distance over to their side.

Moreover Yün Chou is much more favourably situated than T'êng-yüeh for increasing our trade with Yün-nan. T'êng-yüeh is already connected with Bhamo by a mule road which has been shortened and improved in the last few years. Were the railway extended to Yün Chou the trade between T'êng-yüeh and Bhamo would doubtless continue as usual. But Yün Chou is so situated as to be much nearer than T'êng-yüeh to many places which trade with us already, and to many more with which we at present have practically no dealings. Yün Chou has also the great advantage that, lying as it does far to the eastward of T'êng-yüeh, it is in a much better position than the latter town to compete with the French railway.

The following table of distances will make this clear:

	Distance in miles to T'êng-yüeh	Distance in miles to Yün Chou
From Yung-ch'ang Fu	61	100
„ Yün-lung Chou	122	180
„ Hsia-kuan	159	109
„ Li-chiang Fu	264	222
„ Shun-ning Fu	137	24
„ Ching-tung T'ing	263	102
„ Mien-ning T'ing	216	55
„ Wei-yüan T'ing	268	107
„ Ssŭ-mao T'ing	346	185

It will be seen from this that Yung-ch'ang and Yün-lung are the only two places of any importance which are nearer to T'êng-yüeh than to Yün Chou, while in the case of Yung-ch'ang the distance between it and Yün Chou is so small that the Yün Chou railway would be very useful to that place.

Hsia-kuan, the centre of the richest part of Yün-nan, is brought considerably nearer, and the last five places can be brought into trading relations with us where they would hardly be affected by a line to T'êng-yüeh.

Still if it turns out that it is feasible to extend the T'êng-yüeh line to Hsia-kuan, this route certainly has some advantages. There is no denying the fact that the railway to T'êng-yüeh can be much more easily and cheaply constructed than that to Yün Chou. This undoubtedly makes it the more tempting project of the two to statesmen hampered by financial considerations. But, unless the possibility of an extension eastward is proved, it would seem well to think twice before committing ourselves to a merely local line, and renouncing the project of through communication between India and Eastern China.

To summarise shortly the conclusions arrived at:

1. The construction of the whole line from Kun-long to the Yangtze is too vast a project to be undertaken at once.

2. But if we are content to do nothing in the way of railway extension into Yün-nan, the French will in the

future be in possession of the greater part of the line which will some day connect India with Eastern China, and will also be in a position to take from us the trade of Western Yün-nan.

3. To counteract this the Burma Railway should be extended from Lashio to Kun-long and the Yün-nan Railway constructed from Kun-long to Yün Chou, with a view to its gradual extension eastwards in the future.

4. If the proposed railway from Bhamo to T'êng-yüeh can be extended eastward to Hsia-kuan it must prove a formidable rival scheme to the Kun-long route, but if T'êng-yüeh is to be the terminus it is likely to be ineffective in retaining the trade of even Western Yün-nan.

Before quitting the subject of railways in China, one more question must be touched on. The Chinese have in the last year or two evidently become alarmed at the power which they consider railway concessions are likely to give to foreigners in China. In many parts of the country agitations have been started with the object of getting all railway construction into Chinese hands. Nothing is more natural than that such ideas should prevail, but if foreign diplomatists are content to give way to these opinions, the opening up of China by railways is likely to be considerably delayed. The average Chinaman would be very chary of entrusting his capital to officials to build a railway; moreover the modest rate of interest paid by a railway company would not be at all likely to satisfy the trading instincts of the Chinese investor. So far the attempts of the officials to raise money for railway construction seem to have been a failure, and in one or two cases extra taxation has been suggested as the only means—a measure hardly likely to make railways popular.

Quite lately however (1907) the patriotic desire of the Chinese to construct railways themselves without the aid of either foreign capital or foreign engineers has in some provinces actually resulted in offers of considerable sums of money from leading merchants and others to be invested in railway construction. Whether the money would be forthcoming for such a hazardous investment as the Yün-nan railway must remain doubtful. However, an encouraging sign for

the future is to be found in a recent application made by the Viceroy of Yün-nan for the services of an American-trained Chinese railway engineer. That all railways in China should eventually be constructed and worked by the Chinese is both natural and inevitable, and if the Chinese Government would undertake the construction of the line from the Burmese border to the Yangtze, it would be a satisfactory solution to all concerned. Two things are necessary—a sufficient number of skilled engineers, and some honest men to be in charge of the finances. Time will doubtless supply the former, but will honest men ever be found?

CHAPTER IV

NAM-HKAM AND MÖNG MOW.

Chinese soldiers in the Kachin hills—Chinese officials arrive in Bhamo—Expedition to find the frontier "gates"—Good shooting—Nam-hkam—The Shan or Tai race—A widespread people—Their literature and language—A plain-dwelling race—The Möng Na sawbwa—Two thousand taels for a beard—The San-ta sawbwa—Möng Mow—An opium-smoking chief—Shan theatricals.

IN the latter half of October, 1893, considerable stir was caused in Bhamo, the little frontier town of Burma, by the appearance of parties of Chinese soldiers in the Kachin Hills, which here divide the Irrawaddy plain from the Chinese province of Yün-nan. According to bazar rumour the Chinese had come to demand the districts of Bhamo and Momeit from the British Government, with the invasion of Burma by a Chinese army as the alternative in the event of a refusal.

Neither Burmans nor local Chinamen found any difficulty in believing this, and it is not to be wondered at that the prestige of the Chinese is still great in a part of the country that has in former times suffered much from their armies. Indeed, only a short time before the annexation of Upper Burma, Bhamo had been captured by a band of Chinese brigands and successfully held for a considerable time.

However on this occasion the fears of the inhabitants proved groundless, for it turned out that the Foreign Office had arranged with the Chinese Government that the latter were to send deputies to look for some "gates" which were said to have once marked the boundary between Burma and China. On the 3rd November the deputies themselves arrived in Bhamo, carried in sedan chairs, much to the amusement of the Burmese populace.

The frontier had not then been delimitated and the Chinese Government attached much importance to finding these "gates." So it was arranged that a mixed commission

of British and Chinese should go out, to fix their position. Mr Warry, Chinese adviser to the Government of Burma, and Mr Martini, District Superintendent of Police, were accordingly deputed to go with the Chinese officials. An escort of 50 men of the 19th Yorkshire Regiment under Lieutenant Fife went as escort, and I accompanied the party as Intelligence Officer.

The Chinese deputies were P'êng, a Hu-nan man who had previously held official rank as a magistrate, and Yüeh, a small local official from T'êng-yüeh T'ing (Momien). They were also accompanied by the T'êng-yüeh telegraph clerk who, on the strength of his ability to send English messages by the Morse alphabet, came as interpreter. He struggled valiantly with the difficulties that English pronunciation presents to a Chinaman and was occasionally almost intelligible, but luckily Mr Warry's knowledge of Chinese rendered the clerk's services unnecessary in official communications.

We left Bhamo on the 17th November, and our search for the frontier "gates" took us through parts of the Kachin Hills and Northern Shan States which even in 1893 were well known and pretty thoroughly surveyed. I do not intend therefore to give any account of this part of our journey, which was only notable for some excellent shooting we got in the Shweli valley at Nam-hkam and Se-lan. Duck and geese formed the principal part of the bag, but we also shot hares, partridges (Chinese francolin), coolan (*grus cinerea*), snipe, solitary snipe, and woodcock.

We succeeded after some trouble in finding all three gates; the Hu-chü Kuan, the Tien-ma Kuan, and the Han-lung Kuan. The so-called gates, I should mention, are solidly built stone archways which perhaps originally had gates across them. They no doubt marked what was the frontier 200 years ago, but in their last war against China the Burmese regained a good deal of territory, and the present boundary has been rightly fixed without any reference to the position of the gates.

On the 7th January 1894 we found ourselves at Nam-hkam, our work finished, and the Chinese deputies invited Mr Warry and myself to go through a bit of Yün-nan with them.

Nam-hkam will be found on the map in latitude 23° 50′ and longitude 97° 45′. It is in the Northern Shan States and is part of the large tract of country governed by the sawbwa of Theinni, or Hsen-wi, to give the name in its more correct Shan form. Nam-hkam has however a hereditary ruler of its own with the rank of Myosa, i.e. Town Eater, a suggestive title which seems to fully acknowledge the oriental principle that the chief duty of the taxpayer is to support his ruler. The Myosa is usually given the courtesy rank of Sawbwa, the Burmese corruption of the Shan word Sow-hpa, Lord of the Sky, which is the usual title of a Shan chief[1].

The town lies in an extremely rich plain some 30 miles long and six miles wide, full of Shan villages and paddy fields. This plain is partly in the districts of Nam-hkam and Selan, and partly in the Chinese Shan State of Möng Mow[2]. It is inhabited entirely by Shans.

This very civilised and widely spread race call themselves Tai, Shan being the Burmese name for them, while the Chinese call them Pai-yi. The Siamese are now the only large kingdom of this race that remains, but they formerly governed a wide extent of country in western Yün-nan and northern Burma, and at one time were so formidable that they conquered Burma and established a Shan dynasty there. The bulk of the Shans now live split up into a great number of semi-independent states, some tributary to Burma, some to China, and some (the Lao States) to Siam.

But the kingdom of Siam and these numerous Shan states do not by any means comprise all the members of this race. To the west one finds them in Assam and in the Chindwin valley. The plain country in the north of Burma, including the Bhamo, Mogaung and Momeit districts, is almost entirely inhabited by Shans. In southern Yün-nan and on the Tong-king border they occupy most of the low-lying valleys. There are even small communities of them in northern Yün-nan near the upper Yangtze, and I have found at least one Shan village in the Tibetan kingdom of Mi-li[3]. In Kuei-chou province they exist under the

[1] T'u-ssŭ (local controller) is the Chinese equivalent.
[2] Or Mêng-mao according to the system of transliterating Chinese.
[3] Lat. 28° 10′, long. 100° 50′.

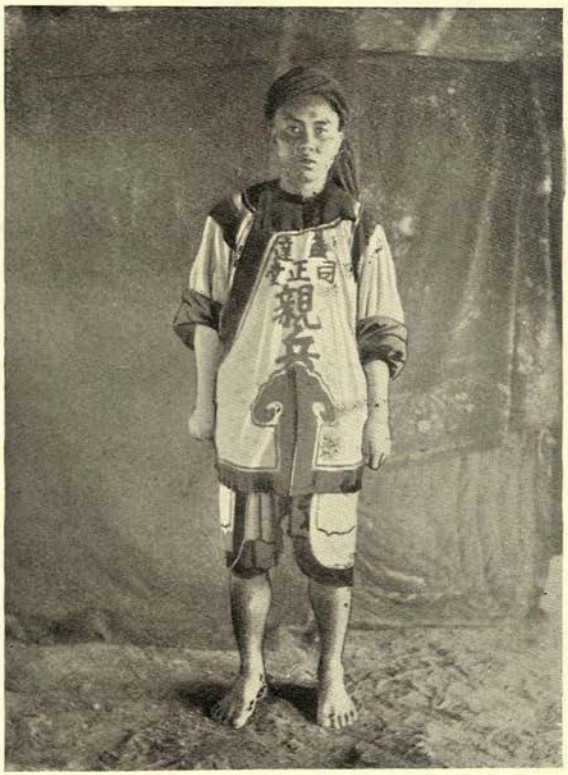


Photo by Major H. R. Davies

A Chinese Shan soldier

name of Chung-chia, and I have little doubt that considerable numbers of them might be found in the southern provinces of Kuang-hsi and Kuang-tung. The Yün-nan Chinamen in fact say that the Cantonese are Shans by race, and the facial resemblance between the Shan and the southern Chinaman is certainly remarkable.

All the more civilised Shan States from Kamti at the sources of the western Irrawaddy down to Bangkok have an alphabetical system of writing and a very considerable literary language, which differs so much from the ordinary language used in conversation as to be incomprehensible to an uneducated man. In the more isolated communities, where the Shans have been swamped by the Chinese, though they preserve their own tongue in talking they often have no knowledge of any system of writing it.

Spread over such a large extent of country, there are naturally diversities of dialect in the language, but Shans from very different countries can understand each other. I remember a Siamese official from Bangkok who had little difficulty in understanding the conversation of the Bhamo Shans. In religion they are Buddhists of the Burmese type of Buddhism, but the priests are much more lax in their observances than those of Burma.

They are a short, but very strongly made race, yellow in complexion, with features of a decidedly Mongolian type. A very nice, pleasant people to travel among or to have anything to do with, as long as one does not want to get any work out of them. They can work hard enough in case of necessity, and many of them are very energetic traders, but as long as they can live comfortably by working at their fields for half the year, most of them prefer to spend the rest of their time in smoking and chewing betel nut.

They are not at all warlike or unfriendly to strangers. Their curiosity is certainly great, and they will sit round in scores and hundreds to look at a European, but it is a respectful curiosity, unaccompanied by the bad manners which, among the races of Eastern Asia, seem to be a monopoly of the Chinese. I must have travelled some fifteen hundred miles through Shan countries, and I never remember any difference of opinion or unpleasantness of any kind.

One more characteristic of the Shans I should mention is that they are not a hill people. It is true they usually live in a hilly country, but their own villages and fields are always in the plains and river valleys which lie in between the ranges, the actual hills being inhabited by other tribes. In Yün-nan itself they own most of the valleys below 4000 feet, anything under that level being considered too unhealthy to live in by the Yün-nanese Chinaman.

On the 8th January we left Nam-hkam, crossed the Shweli at Nawng-hok ferry and camped in Chinese territory at the large village of Möng-ping, where we slept in the Shan monastery.

Our companions besides the Chinese deputies P'êng and Yüeh were the two Shan sawbwas of Möng Na[1] and San-ta[2]. The first of these chiefs is a very remarkable figure to meet with in this part of the world—a man of about 40 with a bald head, a red complexion, and a beard of enormous length. Dressed as he was in a long robe tied round the waist by a cord, one would most certainly take him for a French priest. It would not enter one's head to imagine that he was a Shan. He had a most genial manner, always spoke at the top of his voice, and was the greatest friends with everyone.

Of his beard he was immensely proud, and in the early morning he would thrust it into a black silk bag to protect it from the dew. It cost him very dear a few years ago. He told us the story himself of how Ting, a Chinese general who had risen from a very low station of life, came to Möng Na and was consumed with jealousy when he saw the sawbwa's beard. He asked him how he, a mere aboriginal chief, dared to come into the presence of a Chinese general with a beard of such length, and ordered him to shave it off or pay a fine of two thousand taels. The money was paid without hesitation.

The sawbwa was however not entirely satisfied with his appearance. Though he was not much over forty, he longed for the honour and respect which in China are paid to old age, and he begged Warry to try and get him some medicine which would turn his beard white. He was much surprised

[1] Called Kan-ngai or Kan-ai by the Chinese.
[2] Pronounced Chan-ta by the Chinese.

and disappointed when told that there was no demand in England for hair dyes of that colour. Perhaps the lapse of time has by now given him his heart's desire.

The San-ta sawbwa was a much younger man, with a decidedly intelligent but rather shifty-looking face, much pitted with small-pox. He was extremely anxious to learn about western inventions, and was greatly struck with our tents and heliographs. He had not a very good reputation among the Shans and was said to have succeeded to the sawbwaship by putting one of his relatives out of the way. An account of his untimely end at the hands of the executioner will be found on a later page[1].

We had no escort of our own except a nominal one of a corporal and four men of the Yorkshire Regiment, whom we took more as a matter of dignity than from any anticipation of danger.

Our second march took us into Möng Mow, the capital of the Chinese Shan State of that name. We were met about a mile from the town by some Chinese troops and by some of the Shan followers of the Möng Na and Möng Mow sawbwas. The Möng Na men looked very well in green sleeveless coats with a black border, and most of them were armed with breech-loaders. The town is built at the foot of the bare range of hills which bounds the Shweli valley on the north, and is surrounded by a brick wall in a very fair state of repair. The place was en fête at the time, as one of the Möng Na sawbwa's four sons was just going to be married to a daughter of the Möng Mow chief.

We halted the next day and went to pay a visit to the sawbwa. His palace was a very small tumble-down building, and the sawbwa himself a little shrivelled-up looking man, extremely nervous in the presence of the Chinese officials, and I believe almost incapable of managing his affairs through over-indulgence in opium[2].

In the evening we went to an amateur theatrical performance, in which most of the parts were taken by members of the two sawbwas' families. The piece was in Shan, but was a translation from the Chinese, and was all sung to the monotonous tune of the Chinese theatre.

[1] See page 189.
[2] He died not long after our visit.

CHAPTER V

MÖNG MOW TO MANWAING AND BHAMO.

Leave Möng Mow—A village of outlawed Chinese—An impenetrable hedge—The Möng Wan plain—The Chinese Shans—Their dress—The Möng Mow dress—Möng Wan—A boy sawbwa—The Ho-hsa chief—A fine old gentleman—La-hsa—A recent rebellion—The sawbwa in trouble—A pleasant unsophisticated old chief—The valley of Ho-hsa and La-hsa—Its A-ch'ang inhabitants—A distinct race from the Shans—The sawbwas of Chinese extraction—Man-waing—The Trade Protection Levy—A Chinese dinner—Playing *mora*—Margary's murder—Responsibility of officials for murders in China—Chinese soldiers—Cartridges that do not fit the rifles—A Panthay officer—Kachins' heads in baskets—Back to Bhamo.

ON the 11th we started for Möng Wan, the next Shan state to the north. Our road led over the hills which divide the Shweli from its tributary the Nam Wan, and entailed an ascent of about 2000 feet and a corresponding descent on the other side to Sang-hawng or Chang-fêng-kai, which is the only place in the Möng Wan plain where there are any Chinamen living.

They are many of them men who have made things too hot for themselves elsewhere and have fled from justice to this out-of-the-way corner where Chinese officials are not likely to trouble them. No Yün-nan Chinaman would come and live here from choice. The level of the plain, like that of the Shweli, is about 3000 feet, and it is therefore considered too unhealthy to live in during the hot part of the year by men so liable to fever as the Yün-nanese.

The village is well defended by a very thick and broad hedge of a sort of thorny bush through which it would be impossible to penetrate without deliberately cutting a way. It is doubtless intended as a precaution against attack by the Kachins who inhabit the surrounding hills. I have seen the same sort of hedge round Wa villages, east of the Salween.

The next day P'êng turned up in the morning looking rather solemn and said the head-man of the village had just reported that one of our columns from Bhamo had on the previous day burnt 28 Kachin villages, most of which he said belonged to Möng Wan. The Sang-hawng people are a pretty rough lot and had probably spoken their minds freely on the subject to P'êng, who was certainly in rather an unpleasant position with us as his guests.

Mr Warry promised to send a message to the column to find out what had really happened, and we started on our march. The affair had, as is usually the case in China, been enormously exaggerated. An answer from the column arrived in due course to say that a few houses of one village in our own territory had been burnt, as the inhabitants refused to acknowledge our rule by paying tribute.

We were taking things very easy, and on the 12th only did 7½ miles to the village of Kying-khan. The Möng Wan plain is some 20 miles long and averages five or six in breadth, with the Nam Wan running down the middle of it. The state is called Lung-ch'uan by the Chinese and Mowun by the Burmans. There are plenty of duck, geese, snipe, and coolan here, but it is not quite such a good shooting ground as the Shweli valley which we had just left.

The inhabitants are the real Chinese Shans or Tai Che as they are called by the Shans further south, though they themselves prefer the name of Tai Nö or Northern Shans. Both men and women dress entirely in dark blue, the men wearing round turbans and short jackets and trousers barely reaching to the knee, while the women wear a petticoat of much the same cut as the Burmese longyee with a band of the same dark blue colour wound round the waist, and turbans somewhat of the shape of a cylinder standing up a foot or more high.

This is a different costume from that of the people of Nam-hkam and Möng Mow, who in dialect and customs are half way between the Southern and the Chinese Shans. The men of these two states usually wear the white turbans put on crooked and the enormously broad trousers of the Southern Shan, while the women have a dress peculiar to themselves, the turban much lower than that of the Chinese

Shan women, and with coloured fringes hanging down on each side, while the petticoat is often of large checks of red, white and green.

On the 13th a level road through numerous villages took us to Möng Wan, the capital of the state. We were met at the entrance to the town by the sawbwa, a boy of 10, and his two *amats* or ministers, one a Hu-nan China-man, the other a Möng Na Shan. All three made profound obeisances, and we went on into the town and were put up in a very good three-roomed brick house.

The place contains about 300 houses. Its narrow paved streets and closely-packed houses of soft brick make it look more like a Chinese town, but it is almost entirely inhabited by Shans. The sawbwa was at that time too young to take any part in the management of the state, and his mother, according to Shan custom, was acting as regent till he was old enough.

The next day, still marching in a northerly direction, we forded the Nam Wan, crossed the range of hills which divides the Shweli from the Taping basin at 5300 feet, descended very steeply into the Ho-hsa[1] valley, and crossed the Nam Hsa, a stream 15 yards wide, into the capital of the Ho-hsa state, a town of only 70 houses.

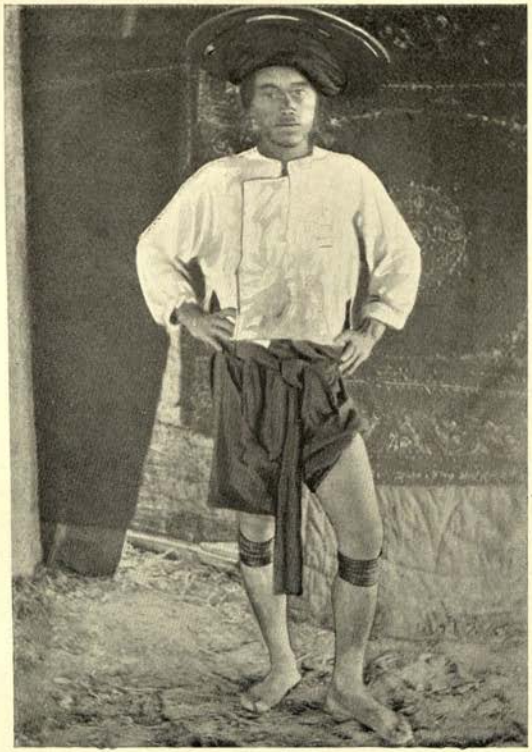
We were received by the sawbwa, a fine-looking old gentleman of 66, with a white moustache and quite a hooked nose. He is the same chief who is mentioned in Dr Anderson's book, *From Mandalay to Momien*, and he remembered all the names of the members of Colonel Sladen's expedition who had visited him in 1868. He said they had stayed with him a long time, and he appeared to have most pleasant recollections of their visit.

On the 15th January a march of seven miles brought us to La-hsa, the capital of the other state into which the Nam Hsa plain is divided. The sawbwa, a man of 56, wore his beard as well as his hair plaited into a pigtail.

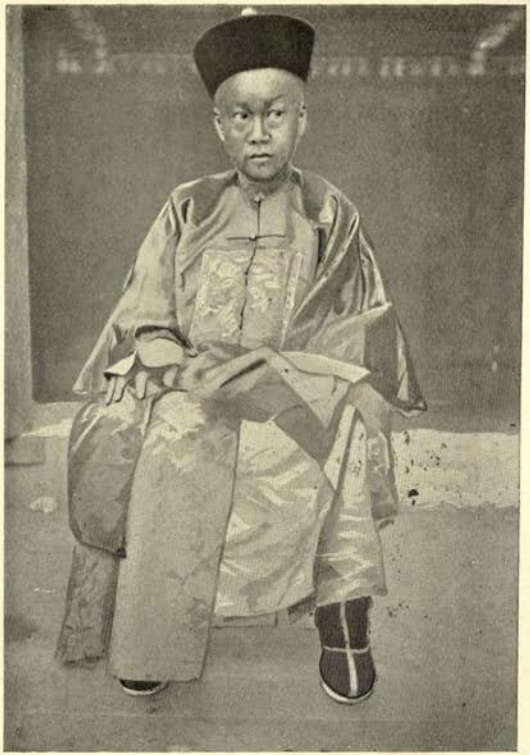
He had lately got into trouble with the Chinese authorities. A Shan priest, a native of Möng Cheng[2], a state lying east of the Salween, arrived in La-hsa, and on

[1] Called Hu-sa by the Chinese.
[2] Chên-k'ang in Chinese.

Plate IV



An A-ch'ang



Photos by Major H. R. Davies

The boy sawbwa of Möng Wan

the strength of his claiming to possess supernatural powers found no difficulty in raising a following of 150 men. With these he made a strong stockade on top of a hill, and for a long time defied the efforts of the sawbwa to turn him out. Chinese troops had to be sent for, and, under the direction of Colonel Liu, a successful attack was made, and the priest and most of his followers put to death on the spot.

The Möng Na sawbwa, who was present on the occasion, received the military decoration of the Peacock's Feather for his services. But the La-hsa chief got into serious trouble for allowing the rebellion in his territory. He was deprived of all rank and titles and now appeared in the ordinary dress of a Chinaman without any official robes or hat.

He certainly did not look the sort of man to put down a rebellion, a pleasant unsophisticated old gentleman with none of the energy of his cousin, the Ho-hsa sawbwa. He remarked in the course of conversation that he did not drink liquor much, as he was afraid it might rot his beard!

He was very anxious to go to Burma, but had to wait till his son was old enough to take his place in the government of the state. The Chinese do not allow a sawbwa to leave his own country for any length of time until his son is fit to act as regent.

The valley in which the two states of Ho-hsa and La-hsa[1] lie is some 14 miles long and not more than two miles across at the widest point. Every inch of the flat ground is cultivated, and the villages are all built at the foot of the hills, evidently because space cannot be spared for them on ground which is capable of being irrigated for rice cultivation. The soil is poor, and the crop of rice grown is barely enough for the people to live on. Consequently large numbers of men, estimated at 2000 yearly, go out every winter and spread over the neighbouring Shan States and the north of Burma in search of work. Most of those who go out, work as carpenters and blacksmiths, in which trades they have a considerable reputation.

The chief claim to interest of these two states is that they are inhabited by a distinct race who do not exist

[1] Hu-sa and La-sa in Chinese, and Hotha and Latha in Burmese. The two states are often spoken of collectively as Möng Hsa by the Shans, and Maingtha by the Burmese.

anywhere else. These are the Nga-ch'angs or A-ch'angs, called Chang by the Shans. These people's language is closely connected with Burmese, and is still more like the language of the Szi, Lashi, and Maru tribes[1] who inhabit the Kachin Hills. It has no resemblance to Shan, except the general likeness which connects all the Indo-Chinese languages. The A-ch'angs are often described as Ho-hsa Shans or, in Burmese, Maingtha Shans, and they have adopted Shan customs, dress, and religion so completely that they will even speak of themselves as Shans. But if further questioned they will always allow that they are not really of the Shan race. In feature too there is a noticeable difference between the two peoples.

The A-ch'angs, however, are not the only inhabitants of this little valley. Its height above the sea is 4500 feet, and it is consequently cold enough and healthy enough for Chinamen to live in, and there are a great number of them in the valley, most of whom have been settled here for some generations. From what the sawbwas told me there are 4000 houses in the two states, of which perhaps a third are inhabited by Chinese or half Chinese families.

The sawbwas are both of Chinese extraction. Their ancestors came from Ch'ung-ch'ing Fu (Ch'ung-k'ing) in eastern Ssŭ-ch'uan 400 or 500 years ago. They were sent by the Chinese Government to repress disturbances which had broken out on the border, and were rewarded for their services by being made rulers of these two states. The sawbwas of Möng Na, San-ta and Möng Ti (Nan-tien) are also of Chinese origin, while the Möng Wan and Möng Mow chiefs are genuine Shans. The whole of these sawbwas, however, intermarry with each others' families and have become practically Shans, and would not now call themselves Chinese.

On the 16th January we had an ascent of 1000 feet and a long and steep descent of nearly 3000 feet into the valley of the Taping, and crossed the river, a slow sandy stream 300 yards wide, by boat to the village of Manwaing[2].

[1] For vocabularies, see pocket in cover.

[2] This place is usually called by us by its Burmese name of Manwaing or Manwyne. Its proper Shan name is Man-ving, which has been corrupted by the Chinese into Man-yün.

The sawbwa of Ho-hsa

Photos by Major H. R. Davies

The sawbwa of La-hsa

The Taping is navigable for boats from Manwaing to the capital of Möng Na which lies some thirty miles higher up, and a certain amount of cotton and other goods is carried by water over this short bit of river. Below Manwaing it passes through the Kachin Hills and runs in a gorge full of rapids which entirely preclude the idea of navigation. From Myothit down to its junction with the Irrawaddy, the Taping is again navigable for boats, and even small steamers can reach Myothit when the water is high.

At Manwaing the river runs though a large well-cultivated plain full of villages. Its length is quite 30 miles and it averages six miles across. It is divided into two Shan states, Möng Na (Kan-ai) on the left bank of the Taping, and San-ta (Chan-ta) on the right bank. But the actual village of Manwaing, with five other villages around it, is an isolated bit of territory belonging to the sawbwa of Möng Ti (Nan-tien), whose state lies 40 miles higher up, on the Nam Ti, the eastern branch of the Taping.

The origin of this arrangement we learnt from the San-ta sawbwa, who told us that in former times much of the western end of the plain was deserted for fear of incursions from the Burmese, and grants of land were offered by the Chinese Government to any chief who would send some of his subjects to establish themselves there. The offer was taken up by the Möng Ti sawbwa of that period, and his descendants still possess this little piece of land surrounded by San-ta territory.

The village contains 100 houses inhabited by Chinamen, is filthily dirty, full of pigs, and smells horribly, a most disagreeable contrast to the clean Shan villages round it.

At the eastern end of the place is a large salt depot where we were lodged. At the western end was a mud fort, garrisoned by 200 men of the Trade Protection Levy.

These troops were paid out of the dues exacted from the Chinese traders, and they thus cost the Government nothing. In return for these dues, the safety of the trading caravans was guaranteed while passing through the Kachin Hills which lie between Manwaing and the Burmese border. Anything dacoited on the road was made up to them by the

Government, the amount being deducted from the soldiers' pay. There were small forts garrisoned by these men all along the road from Manwaing to Nampaung.

The traders of Manwaing asked us to dinner one day, and the next evening we dined with Colonels Liu and Wang in the fort. Some of their dishes, such as birds' nest soup, are excellent; others are very much the reverse, pigs' insides often forming part of the menu.

Neither of the colonels was at all averse to drinking, and after dinner they played a game which consists in two players sitting opposite each other and simultaneously shooting out one or more fingers of one hand, at the same time shouting out a number. The player who shouts out correctly the total number of fingers shown by the two players wins, and the loser has to drink a glass of rice spirit as a forfeit. The game is, I believe, practically the same as the *mora* of the Italians.

On the 22nd January we set out westward for Bhamo, passing, about two miles out of Manwaing, the place where Margary of the Chinese Consular Service was murdered in 1875. He had just made a journey through from Shanghai to Bhamo and had gone back to Manwaing to make arrangements for Colonel Browne's expedition, which was just leaving Bhamo for T'êng-yüeh (Momien). While he was alone at Manwaing, when the main expedition was still on its way there, he was assassinated. Whoever the actual murderers may have been, there is little doubt that the deed was done by order of the Viceroy of Yün-nan.

In nine cases out of ten when Europeans are killed in China, the officials, if not the direct instigators, are really responsible for the murder, and could have stopped it if they had liked. The natives of a district very soon find out if their official is anti-foreign, and those who have the same leanings feel that they can act with safety. If every murder was followed by the decapitation of the official in whose district it took place, murders would cease. At present killing an Englishman is apt to prove a safe and agreeable pastime for evil-disposed Chinamen.

After three miles of flat going we began to climb the Kachin Hills and camped at 4,900 feet at the fort of Sare the headquarters of Colonel Wang, who commanded the Trade

P'êng Liu Wang

Photo by Major H. R. Davies

Our hosts at Man-waing

Protection Levy. The soldiers were chiefly from Hu-nan and Ssŭ-ch'uan provinces. The men were good enough, but they were wretchedly armed. Among a hundred men one might see ten different sorts of weapon, from the most modern rifles to flint and steel muzzle-loaders. Cartridges are served out anyhow, and a man often gets ammunition that does not fit his rifle. They therefore like getting weapons of as big a bore as possible. A small cartridge wrapped round with rags or paper can be got into a big bore rifle and might go off, but a big cartridge with a small rifle is naturally hopeless.

On the 23rd a fairly good road, still through the hills, brought us to Shih-t'i, a fort commanded by Ma, a Panthay or Chinese Mahommedan, who formerly raised and commanded a band of men of his own and used to escort trading caravans through this part of the Kachin country, getting paid by the merchants. Now that the Chinese Government had taken over the safe-guarding of the road, he had been given the rank of an officer in the Trade Protection Levy.

Just before entering the fort we passed between two Kachins' heads in little baskets, stuck on poles on each side of the road. The Chinese told us they could not walk far from their forts alone. Only three or four months before this a Chinese non-commissioned officer had been murdered on the road.

At Sare P'êng, the Chinese deputy who had been with us all the time, left for Momien. He had been most civil and friendly, and we had got on excellently with him and were very sorry to part from him.

On the 24th a steep downhill road took us to the Nampaung, a mountain stream 30 yards wide, which forms the boundary between Burma and China, and we said good-bye to Colonels Liu and Wang and climbed up to the British fort, garrisoned then by a detachment of the 3rd Burma Infantry under Lieut. Whitehead. A hilly march to Myothit and a boat journey of 7½ hours down the Taping brought us into Bhamo on the 26th January, 1894.

CHAPTER VI

RANGOON TO SADON.

Objects of my journey—Getting an interpreter—Mandalay to Myitkyina—Sadon—The Kachin hills.

My first journey into Yün-nan had been merely a short trip skirting along the Burmese border, but towards the close of 1894 I was ordered to make a more extended exploration in this part of China. It had been already decided that the railway going eastward from near Mandalay into the Shan States could, if it were thought worth while, be extended to a place called Kun-long (lat. 23° 25′, long. 98° 40′), a small Shan village on the left bank of the Salween. This place, though just within British territory, is only a few miles from the Chinese frontier, and is important as being the ferry by which the main road from Yün-nan to Mandalay crosses the Salween.

In former times a fair amount of trade came along this route, but since Mandalay and Bhamo have been connected by steamers, it has been almost entirely abandoned in favour of the Yün-nan-Ta-li-Bhamo road. The principal object of my journey was to get information about the different roads leading from Kun-long into China, and to try and estimate what chances there were of a revival of trade in this direction, and of extensions of the railway into China itself.

On the 6th December, 1894, I arrived in Mandalay, but was kept waiting there for some days owing to the non-arrival of my passport from Peking. I made use of the time in looking for a Chinese interpreter, and was fortunate in getting hold of a very good man, a Panthay or Chinese Mahommedan, Ma-ko-li by name, who could talk Burmese, and could read and write Chinese fairly well. I had

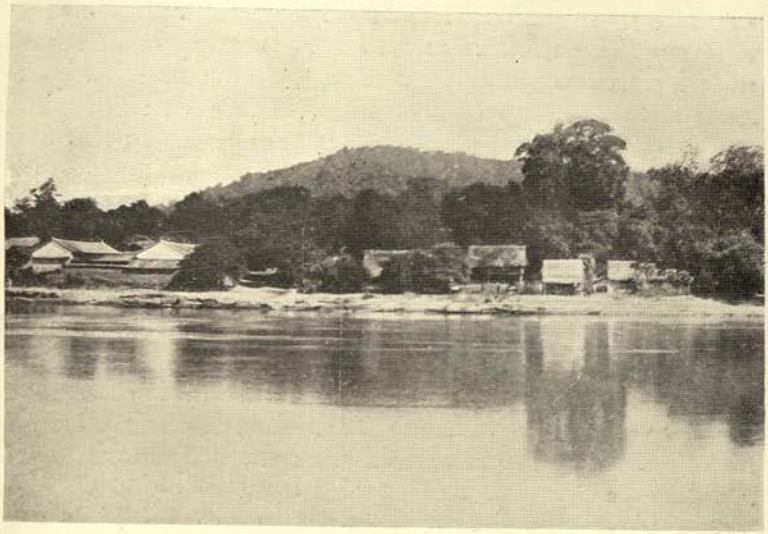


Photo by Major C. H. D. Ryder

Myothit

Photo by Major H. R. Davies

Bridge at Nam-li, between Myitkyina and Sadon

previously tried to get a man in Rangoon, but I found all the Chinamen were afraid to come with me. They said if they went to Yün-nan with an Englishman their families would be at once imprisoned by the Chinese authorities. Ma-ko-li, however, had no such fears, and I found him all through my travels a most trustworthy man, not the least afraid of Chinese officials or anyone else.

Getting a good interpreter in China is a great difficulty. To do things correctly in one's dealings with officials one ought to have a man of the official or literary class. But such a man, besides wanting big pay, would in many ways be the greatest possible nuisance, and would think it quite beneath his position to travel in anything but a sedan chair. What I wanted was a man capable of climbing a hill top with me to question the local guide about the surrounding country. But the only people who ever walk in China are those who cannot afford to ride or be carried, and it would not do to have a man of the coolie class who could not read or write and knew nothing of etiquette. I think the best thing is to strike a mean and get an interpreter of the merchant class who, though not up in every detail of official etiquette, is fairly presentable and is capable of writing an intelligible letter.

By force of example it is quite possible to teach men of this sort the advantages of exercise. I have had two different interpreters in China. They both began by saying they had never walked a yard in their lives and would be quite incapable of getting through a day's march unless they rode the whole way. In a few months' time I would have backed them against most men as long-distance walkers over a rough country. In fact in my last journey my interpreter voluntarily gave up his pony, saying he preferred walking to riding, and did not want to be bothered by having to lead an animal. Chinamen are quite willing to take to our ways if we stick to them, and do not give in to their ideas, but to adopt their customs is naturally accepted as an acknowledgment of the superiority of Chinese ways.

My plans were to go to Ta-li Fu and from there down to Kun-long, then to strike eastwards to P'u-êrh Fu and Ssŭ-mao T'ing (lat. 22° 50′, long. 101°), returning probably by a road from P'u-êrh through Shun-ning Fu (lat. 24° 35′,

long. 99° 55′) to Yung-ch'ang Fu, and back to Bhamo through Lung-ling T'ing (lat. 24° 35′, long. 98° 40′). The return journey by this particular route I was not, as will be seen subsequently, able to accomplish, as I had to take a shorter road to get back in time.

The ordinary road to Ta-li Fu is by Bhamo and T'êng-yüeh T'ing (Momien), a route which several travellers had already followed. So to see some unexplored country I decided to start from Myitkyina (lat. 25° 25′, long. 97° 25′) and go through Sadon and Chan-hsi (San-si) to T'êng-yüeh. As the Burma railway system was to be extended to Myitkyina, this road might also become of some importance in the future.

I left Mandalay on the 15th December for Bhamo, and went on from there by a small Government steamer up what is known as the "third defile" of the Irrawaddy, a magnificent rocky gorge which extends from Hsen-bo down to Bhamo, a distance of 42 miles. The river, which at Bhamo must be a mile wide, is here in one place compressed into a width of 60 yards, with a depth which no one has succeeded in plumbing. It is only navigable for steamers in the dry season, the current in the rains being too strong for anything to steam against. The journey at that time of year has to be done by native boat and is attended with some risk. Up-stream boats are towed, and it often takes a week and sometimes more to do this short distance. The down-stream journey is a matter of a few hours, but can only be attempted with experienced boatmen who live in the defile and thoroughly understand this part of the river. From Senbo on to Myitkyina, another 80 miles, is all plain sailing, and steamers run without difficulty all the year round. The existence of this defile, however, cut off Myitkyina from the rest of the world for half the year, and it was not till the railway was extended to that place in 1899 that this was remedied.

On the 24th December I arrived at Myitkyina, a village on the right bank of the Irrawaddy, which is the head-quarters of the most northerly district of Burma.

I halted here on Christmas Day to arrange about mules, and on the 26th crossed the Irrawaddy by ferry and started for Sadon, taking four days to do the 42 miles which separate this place from Myitkyina.

Sadon is one of the principal posts among the Kachin Hills. It was established in the winter of 1891—1892, and there was a good deal of fighting in the neighbourhood during which several British officers lost their lives. In the following year (1892—1893) it was Sima, another fort further south, that was attacked, and a considerable number of troops and military police had to be brought into the Kachin Hills to relieve it. Since then the Kachins seem to have acknowledged themselves beaten, and as the Government does not interfere with them much, they have settled down to the new order of things fairly contentedly. It is now safe to travel nearly anywhere without escort.

The fort is at a height of 4,660 feet and was then garrisoned by two guns of a mountain battery and about 200 Gurkhas of the military police.

CHAPTER VII

SADON TO T'ÊNG-YÜEH T'ING (MOMIEN).

Leave Sadon—A cold night—A frontier head-man—Cross the frontier—A fine view—Mêng-ka—A frontier fight—Pheasants—Correspondence with the San-si sawbwa—Leave Mêng-ka—San-si—Suspicions of the Chinese officials—Meeting with a Chinese officer—T'êng-yüeh—The walled cities of China—The names of T'êng-yüeh—Administration of a Chinese province—Military administration—Mr Jensen.

On the 4th January we left Sadon and made a short march of eight miles to the village of Sin-ngawp or Ch'ieh-ma-ho which though well on our side of the frontier is inhabited by Chinese. On the 5th, 10 miles of pretty stiff going brought us to the top of the high range which forms the Burma-China boundary. There is no village here, but some grassy country on the top gives plenty of room for camping.

This, like most places on the frontier, has several names. It is called Ch'ang-ti-fang by the Chinese, Phye-byang by the Kachins, and is marked as Sansi Gorge on the survey map. The Shans doubtless have yet another name for it. The height is over 9000 feet, and it is a decidedly cold place at this time of year. In shady places there was ice all day on the small streams, and it came on to freeze in earnest at four o'clock in the afternoon, so that at night my sponge was frozen hard inside a carefully closed up tent. As it turned out, this was the highest and coldest camp that I had in the whole of this journey, and I have noticed in subsequent travels that these hills about the frontier are extremely cold even when one does not camp at great heights.

In the camping ground I met several men of the Li-so tribe who had come from Mêng-ka (Möng Ka), a small circle of villages through which I should pass on my way to San-si. They told me the Mêng-ka head-man was out in the jungle near there cutting his crops, so I sent the Ch'ieh-

ma-ho head-man, who had accompanied me, to see if he could find him and tell him I should be entering his village the next day. Just before dark he turned up. He is quite a jungle man, more like a superior Kachin sawbwa[1] than a Chinaman with official rank. He is known as the "Yang-hsing-kuan" which simply means "the official whose surname is Yang." His office is hereditary. It appears that an ancestor of his at some time or other conquered the original Li-so inhabitants for the Chinese Government, and as a reward he and his men were settled down there as soldier colonists, and the government of the place was given over to him and his descendants. The Li-sos and Chinese now live there together quite amicably, and no doubt the original settlers took Li-so wives, so that their descendants are as much Li-so by race as Chinese.

Yang said he had had no orders about my coming, but he made no difficulties and said he would go with me to Mêng-ka the next day.

The next morning, as I should be crossing the Chinese boundary, my escort of 15 military police returned to Sadon. My party now consisted of an interpreter, two Indian servants and a syce, and 10 Chinese baggage mules with two Chinamen and a Shan as mule drivers. For surveying instruments I should have much liked to have taken a plane-table, but knowing very little about China at the time I imagined that as I was the first traveller of recent years to enter China from the west, anything so conspicuous as surveying with a plane-table might arouse hostility and perhaps lead to the failure of the expedition. I was sorry afterwards that I had not taken one, and on subsequent journeys I always used this instrument. As it was, I had to survey with a prismatic compass, but I took care to keep drawing rough sketches of the country as I went along, so as to minimise the effect of being without a plane-table as much as possible. I also carried two aneroids, a boiling-point thermometer, and a 6-inch sextant and artificial

[1] The Shans and Burmese apply the title Sow-hpa or Sawbwa to the Kachin "duwa" or chief. But the Kachins are such an independent people that in many cases each village has its separate independent chief, and a Kachin sawbwa has never more than a few villages under him, so he is a much smaller man than a Shan sawbwa whose territory may run to thousands of square miles.

horizon with which I took latitudes every clear night. My maximum and minimum thermometers very soon got out of order and defied all my efforts to get them right again. The survey was done on a scale of four miles to the inch, and I tried as far as possible to get in all the country that came in sight rather than to put in with minute accuracy the part near the road.

Soon after leaving camp we crossed the actual watershed which is presumably the boundary. They say there was formerly a boundary "gate" here called Shên-hu-kuan. From all this part of the road there are magnificent views of the surrounding country. To the south the hills near Sima are plainly visible. To the south-east in a nearer range of hills the gap is seen through which the road from Mêng-tien to San-ta passes, and beyond this gap is visible another range which is probably that which divides Möng Na from Ho-hsa. Far away to the east can be seen a high mountain chain which separates the Shweli from the Salween. To the north this range stretches away till it is hidden by the spurs of Tabu Pum; to the south it culminates in a very high and prominent conical hill called Kao-li-kung which is about 12,000 feet high. South of this the range seems to get lower very rapidly.

A steep descent of 1,400 feet brought us into the little Mêng-ka paddy plain which is inhabited by Chinese and Li-sos. The land is all cultivated but is not fertile, and the people do not get much more than a bare living off it. The head-man put me up in his house and I determined to halt here over the 7th, so as to write to the San-si sawbwa to tell him I was coming the next day.

A Shan silversmith from San-ta was a fellow-guest in Yang's house—rather an intelligent man who professed great contempt for the Chinese of Mêng-ka. Certainly the Shans are in many ways a much more civilised race than the Chinese.

On the morning of the 7th news came in that a caravan of Chinese traders on their way from Manwaing to Mogaung had been attacked by Kachins at a place called Möng-lawng[1]. Six mules with their loads had been stolen,

[1] I believe this to be the Shan form of the name marked on the Survey of India map as Ma-lau.

and four Chinamen wounded. In the afternoon one of the injured men was brought in with a bullet wound in his thigh. They had been going by rather an out-of-the-way road so as to avoid passing Sadon, where they are liable to be searched for opium. The main road is often avoided for this reason.

The Kachins who committed the dacoity were acknowledged by the Yang-hsing-kuan to be under him, but he did not trouble himself much about the matter. He told the Chinamen it was their own fault, that they ought to have come by the main road where he could have protected them, instead of trying to sneak through by a bypath, and that, at all events while I was with him, he could not trouble himself about such unimportant matters. I expect as a matter of fact Yang is not very keen on taking the part of outsiders against his own Kachin neighbours, and I should not be surprised if the Mêng-ka men did a little in the dacoity line themselves sometimes. At all events during my stay there several of the inhabitants came to me with bullets in different parts of their bodies which they wanted me to extract!

In the afternoon a letter arrived from the San-si sawbwa in answer to one I had written from Sadon on the 30th. He said he had written to T'êng-yüeh for orders but had not yet received a reply, and begged me to wait a little longer. In consequence of this letter I decided to halt one more day to allow him to answer the letter I had written the day before. I afterwards found that on the 5th, when I was encamped at Ch'ang-ti-fang, a Li-so had gone straight away to San-si and reported that an English officer was crossing the frontier with 200 infantry and 60 cavalry. The sawbwa was very much frightened and had at once written this letter asking me to wait. On the 8th yet another letter from the sawbwa saying there were some very bad Kachin villages on the road, and again begging me to wait till he got orders from T'êng-yüeh. To this I replied that I would halt at Mêng-ka for the 9th and 10th, but on the 11th should go to San-si. It was necessary to say positively that I should start on the 11th, or he might have kept me waiting here indefinitely, and my time was already too short to be wasted in that way.

Mêng-ka though only 5400 feet high is a decidedly cold place. There was ice every night on all standing water, and it did not melt till well on in the day. It was rather depressing having to halt these four days with a feeling of some uncertainty as to the future. The people, however, were exceedingly pleasant and friendly. They are in about the same state of civilisation as the Kachins, and are much to be preferred to the town Chinaman. The head-man, however, retains a little of the bad manners of the Chinese, and made himself rather a bore by spending long periods of time in my room examining all my things. He was much taken with my tooth-brush, and looked at me with pained surprise when I was just in time to prevent him from trying it on his own teeth.

It was during this enforced halt that I first came across pheasants. While I was out for a walk one day, unfortunately without a gun, a cock pheasant got up and flew away, crowing exactly like the English bird. This I subsequently found out is Stone's Pheasant (*Phasianus elegans*), a bird which is somewhat smaller than the English pheasant but very closely resembles it. They are fairly common in many parts of Yün-nan, but I did not shoot many as I had no time to go after them in an organized way.

On the 10th another letter from San-si arrived. The sawbwa had received orders from T'êng-yüeh which said that he was to do nothing to hinder me from coming by that road, but that, as no orders about me had been received from below, he was not to send out an escort to meet me; that if I did not like to wait till orders arrived I could come on, but that I should consider well that there were some bad Kachin villages on the road and that if I was attacked the sawbwa would not be held responsible.

I should have imagined that as I was coming with a Peking passport, he most decidedly *would* be responsible, but I was not going to waste any more time in arguing this point, and determined to stick to my intention of starting the next day. Yang had announced his intention of coming with me till I had got through the Kachin village, but on the morning of the 11th he did not turn up, deterred no doubt by learning the contents of the San-si sawbwa's letter. However he sent three men with me, carrying two guns and a spear between them.

Kachin village

Photos by Captain W. A. Watts-Jones

Entrance to a Kachin village

As it turned out there were no difficulties on the way at all, and at Hpun-kaw, the only Kachin village actually on the road, I found the sawbwa sitting outside his house and went and talked to him for a minute or two. The road crosses the Irrawaddy-Taping watershed at 7000 feet some eight miles from Mêng-ka. At this point is one of the old frontier "gates" called Lao-kuan-ch'êng, which is still in a state of perfect preservation. It consists of two brick arches, each 15 feet high and four yards in length, with a thickness of brickwork of two feet, and a roadway five yards wide through them. The gate is said to have been built by a Chinese official called Wang-shang-shu. At present it marks the nominal boundary between Mêng-ka and San-si, though as a matter of fact the San-si sawbwa has no real authority over the Kachins in these hills. From here is a long steady descent to the San-si plain, during which an occasional glimpse can be got of the Si-na or Chih-na-pa valley which lies three or four miles to the north of San-si, separated from it by a spur which runs right down to the Taping.

On arriving at T'uan-p'o, the principal Shan village of San-si, I was told that the sawbwa was away and that I had better go on and sleep at Kuan-shang where there was a small Chinese official. So at Kuan-shang I pitched my tent and was soon surrounded by a crowd of sight-seers, an elderly man explaining that they had come to look, as they had never seen anyone like me before.

Soon after dark the official turned up. He was only a local head-man and was so uneducated that he had great difficulty in reading my passport. He coolly proposed that I should wait a few days in San-si, to enable him to write to T'êng-yüeh about me and get an answer. This I flatly declined to do, and after I had shown him my passport he had nothing more to say and soon afterwards went away. In the evening he told my interpreter that the sawbwa was not really away, but was, as I had suspected, anxious to avoid meeting me. Like all Chinese-Shan chiefs he is in great dread of the Chinese officials, and his unwillingness to see me must be put down to fear of doing something that would get him into trouble rather than to any want of civility. The sawbwa was in fact already

looked on with suspicion by the Chinese Government, owing to a rebellion which his elder brother and predecessor started three years before. He is now only allowed to rule over the purely Shan villages of the State, those places in which there are any Chinamen living being administered by the Chinese head-man at Kuan-shang[1].

From the account given to my interpreter by this individual, my arrival on the boundary seems to have caused no small stir both at San-si and at T'êng-yüeh. The news was at once sent on to the T'êng-yüeh official, and the 50 soldiers who form the garrison of San-si were sent up to the Lao-kuan-ch'êng Gate and slept there a night. The excitement was not allayed till my messenger from Mêng-ka arrived with the news that the 200 infantry and 60 cavalry had resolved themselves into 10 baggage mules and seven unarmed men.

The inhabitants of San-si are chiefly Shan, but there is also a considerable Chinese population, amounting perhaps to one sixth or one eighth of the whole. The Taping river runs through the plain from north to south, and it is noticeable that the Shan villages on its right bank are all surrounded by walls, as a protection no doubt against the Kachins who inhabit the hills to the west. The San-si plain is in this latitude the eastern boundary of the Kachin country, the hills to the east of it being peopled by Chinese. The height of the plain is only 3,300 feet.

On the 12th January we crossed the Taping by ferry. The river averages 80 yards in width and at this time of year there are places where waist-deep fords can be found in it. A good deal of hill climbing brought us to the small village of Hsiao-ti-fang where we camped for the night. Here again there was unmelted ice all day, and the night was very cold.

This, like many of the frontier villages, was originally a military post placed here by the Chinese authorities to control the border tribes. They have now, however, been settled down as farmers for many generations, though I believe they still receive some small pay or remission of taxes from the Chinese Government. It is probably by

[1] I heard on a subsequent journey that San-si had been handed over to the Sawbwa of Möng Ti (Nan-tien), but do not know if this is true.

military colonies that this part of Yün-nan was originally peopled by the Chinese. Throughout the T'êng-yüeh and Lung-ling districts the word used for a village is "chai," which really means a fortified post.

In the early morning of the 13th a letter was brought to me containing a telegram from the Deputy Commissioner at Bhamo asking me to wait a little, as the T'êng-yüeh authorities objected to my entering Yün-nan. I had already been in Yün-nan a week without any valid objection being offered to my proceeding, and I guessed that the real reason of the objections of the T'êng-yüeh authorities was the report that had been spread that I was coming in with a large force. I therefore decided to disregard this telegram and go on and see the T'êng-yüeh officials myself.

From Hsiao-ti-fang there is a steep climb to the top of a range at 8,300 feet. The descent on the other side ends with four or five miles of a deep gorge into the Mien-ch'in plain. While riding down this gorge I was met by a Chinese officer with a few men. He seemed suspicious and asked why I was coming by that road. I produced my passport and he became more civil and suggested that we should go on to Mien-ch'in and talk the matter over. He went on ahead, and when I arrived there he sent a civil message to say he would start early the next morning, taking with him a copy of my passport, and would leave four of his men to escort me in. He also added that he would come over himself and see me soon.

I anticipated his visit and went to call on him and found him very civil and even cordial in his manner. His name was Yang and he was staff officer to the general at T'êng-yüeh. He said he had met Margary at Sha-yang and had been friendly with a French priest who formerly lived at Yang-pi. He was apologetic about the way he had stopped me on the road, and said his object was to come on to San-si and prevent me being kept waiting there by the local officials. This was of course a polite fiction. No doubt the T'êng-yüeh authorities thought I was coming in without a passport, and had sent him to turn me back if such should be the case.

On the 14th we crossed a rocky ridge a few hundred feet high through small fields divided by stone walls, and

descended into the flourishing little valley of Ho-shun-hsiang. The road turns up this valley and going through a short gorge between two low hills reaches the T'êng-yüeh plain, passing a splendid waterfall 100 feet high, by which the T'êng-yüeh river runs down into the Ho-shun-hsiang valley. Into the pool below this fall hundreds of Panthays are said to have been thrown after the final suppression of the Mahommedan rebellion.

I found an excellent place to pitch my tent near a white temple outside the north-west face of the city, but I very soon found out that pitching a tent near a Chinese town does not answer. Large crowds soon assembled, who though quiet enough after a time became a nuisance, and I always afterwards went to inns in Chinese cities.

T'êng-yüeh has been described in considerable detail by Dr Anderson in his *Mandalay to Momien*, and there is now a British Consul there, so it will not be necessary to say much about it. It was, however, the first walled city I came across in China, and as all these walls are built in very much the same way, a description of it will answer, with variations in shape and measurements, for most other towns. It is nearly a square, each side about 1,200 yards long, and not, in the case of T'êng-yüeh, built square to the points of the compass but facing nearly north-west, north-east, etc. The wall is of brick, nearly 30 feet high and two feet thick, and backed up on the inside by an earth parapet 30 feet thick, and some six feet lower than the wall. This parapet, besides supporting the wall and giving solidity to the defences of the city, acts as a banquette for the defenders to stand on. The top part of the wall is deeply crenelated for men or small guns to fire from, and there is a loop-hole in each bit of high wall between the crenelations. Each face has a gate in it which is usually protected by a wall, similar to, but slightly smaller than, the main city wall, enclosing a square space in front of the gate. The entrance from outside leading into this space is placed in one of its side walls, and is not therefore directly opposite the main gate. These defences in front of the gates also flank the walls, and there are usually somewhat similar flanking defences at the corners and at intervals in other parts of the faces. In T'êng-yüeh there is on one side some remains of

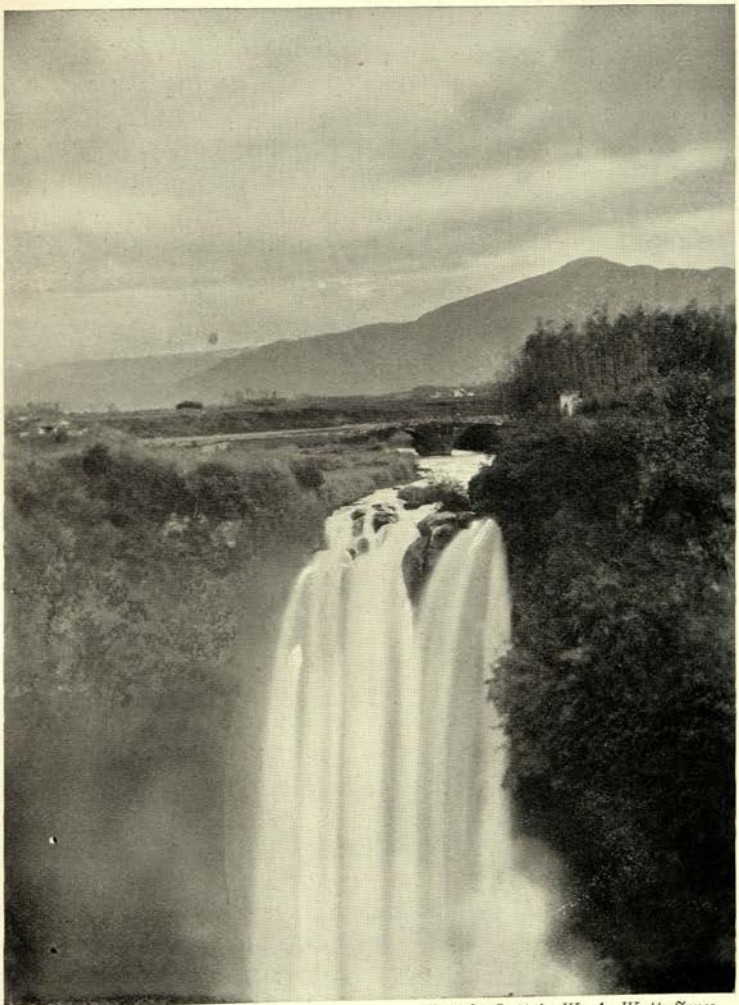


Photo by Captain W. A. Watts-Jones

The T'êng-yüeh waterfall

an old moat, but this is exceptional, for in Yün-nan it is rare to find a town with a moat round it. These walled cities are found all over China, built in much the same sort of way. The Chinese have found them extremely useful in the numerous rebellions which have taken place in that country. Even against modern armies the solidity of these defences would make them formidable obstacles if well defended, especially in a country like Yün-nan where nothing larger than mountain artillery could be brought against them.

T'êng-yüeh has another peculiarity which is characteristic of most Chinese towns, namely, that there are large open spaces and even fields within the city walls, while the principal shops and business houses are in the suburbs. This latter fact is probably to be accounted for by the rule which prevails throughout China that the city gates should be shut all night, so that people coming home late have to seek a lodging outside or to present the officer of the guard with a tip of perhaps as much as threepence to be allowed to go in. At T'êng-yüeh in fact many of the richest merchants do not live in the town at all, but at Ho-shun-hsiang, Yi-lo or one of the other large villages in the plain.

The real original name of T'êng-yüeh given it by the Shans, who no doubt inhabited it before the arrival of the Chinese, was Möng Myen, and by this name the Shans still know it. Momien, as the town is often called by Europeans, is merely the Burmese corruption of this. The origin of the Chinese name I discovered some years afterwards while travelling in a distant part of Yün-nan. Near Ch'ü-ching Fu, which lies to the east of the capital of the province, is a place called Yüeh-chou, formerly a town of the "chou" class. But as it has two other official towns within easy reach, one on each side of it, it was not considered necessary to keep it up, and it was reduced to the rank of a village, and Momien made an official town instead of it. The first syllable "t'êng" means to "fly away from" or "move away from," so that the name T'êng-yüeh Chou means "Moved away from Yüeh Chou." At present its official title is T'êng-yüeh T'ing, but the inhabitants of the place invariably refer to it as T'êng-yüeh Chou, and on the stone guide-posts, which one finds at nearly every cross-road about here, it is always called "the chou."

These remarks about "t'ing" and "chou" will be unintelligible to the reader unacquainted with China, so it may be as well to give an idea of how a Chinese province is administered. First there is the Viceroy[1] (called *Tsung-tu* or *Chih-t'ai* in Chinese), who rules over the two provinces of Yün-nan and Kuei-chou. He is called the Yün-kuei Tsung-tu, his title being formed by combining the first syllables of the two provinces he rules—a process rather common in forming administrative titles in Chinese. The Viceroy's residence is at Yün-nan Fu. Under him was formerly the Fu-t'ai or Governor of Yün-nan who also lived at the provincial capital, but this office has now been abolished as unnecessary, the Viceroy himself performing the duties for Yün-nan, while he is still assisted by a Governor for Kuei-chou. The whole province is divided up into five large administrative divisions called "tao," each under a "tao-t'ai." Each tao-t'ai again has under him two or more smaller divisions in charge of a "chih-fu" or "fu." In the province of Yün-nan there are 14 such divisions. The "fu" is again divided up into a few smaller districts of the other three classes of towns, the "t'ing," "chou," and "hsien."

In some cases, however, there are districts of the "t'ing" and "chou" classes which from their size or position are of special importance, and which are consequently created independent districts (called "chih-li-t'ing" or "chih-li-chou" in Chinese). These are not under any fu, and the official in charge corresponds direct with the tao-t'ai. It should also be noticed that each fu comprises in itself a hsien district, the hsien magistrate being in immediate charge of the town itself and the small district round it. This hsien district usually has a different name from the fu name, so that the town has two names. For instance, Ta-li Fu is also called T'ai-êrh Hsien. Towns can always be called either simply by their names or by their names with the class of town added on, but in conversation it is perhaps more usual to say simply Ta-li or T'êng-yüeh instead of Ta-li Fu or T'êng-yüeh T'ing. Before quitting the subject of civil administration it may be mentioned that there are four other important

[1] Perhaps Governor-General would be a better equivalent, for the Viceroy has no special powers to represent the Emperor.

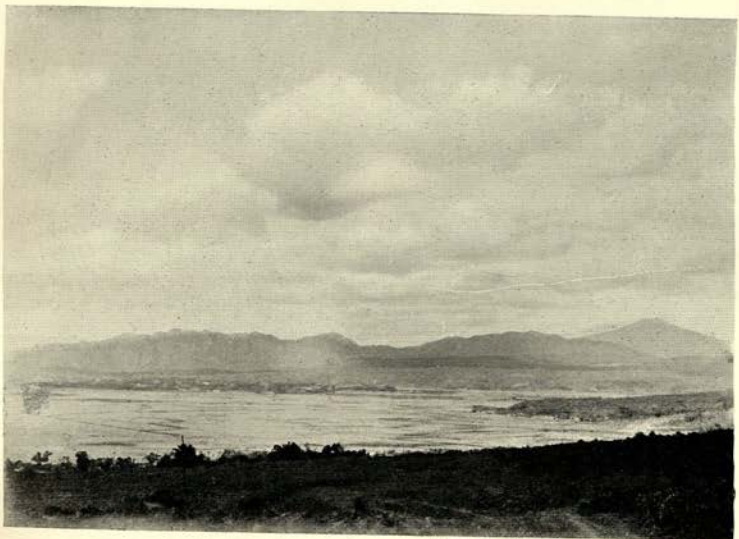


Photo by Captain W. A. Watts-Jones

The T'êng-yüeh plain

officials who live at Yün-nan Fu, viz.: the Fan-t'ai or treasurer, the Nieh-t'ai or provincial judge, the Liang-tao or grain-tax commissioner, and the Yen-tao or salt commissioner. These four with the Viceroy form a board to settle important matters.

The chief military authority in Yün-nan is the T'i-t'ai or provincial commander-in-chief, whose residence is not at the capital, but at Ta-li Fu. Under him are five officers of the rank of Chên-t'ai or general who have their head-quarters at different places in the province and command large districts which do not necessarily correspond with the civil administrative divisions. Under them again are various officers distributed all over the province, their rank corresponding to the size or importance of the garrisons they command. The lowest military officials are those known as hsün-kuan (pronounced *sin-kuan* in western Yün-nan). These men correspond nearly to our police sergeants, and are placed in some of the large villages with from four to eight men under them, in charge of a small circle.

The soldiers are divided into regulars and irregulars. The former are locally recruited men, armed with any sort of weapon, and kept up principally for police purposes. They are hardly expected to do any fighting. The irregulars or "braves" are the men who are sent out where there is any fighting to be done. Many of them are recruited from other provinces, those in Yün-nan coming principally from Hu-nan and Ssŭ-ch'uan. They are the only part of the military forces who can be called soldiers[1].

On the 15th January, the day after my arrival in T'êng-yüeh, a Chinese telegraph clerk who knew a few words of English came to see me, and told me that Mr Jensen, a Dane in the Chinese telegraph service, was expected to arrive at T'êng-yüeh that day, and asked me to change my quarters to the telegraph office. He also told me that P'êng, the Chinese official who had accompanied us in our search for the "gates" the previous year, was now in charge of the T'êng-yüeh telegraph office. He knew nothing whatever of telegraphy, but this is considered a matter of no importance: in fact in many of the Chinese

[1] This was written before the formation of the Lu Chün, the modern army of China.

telegraph offices there is installed as manager an expectant official for whom there is no better post going at the time. This manager has charge of the accounts of the office, and it is consequently unnecessary for the Chinese Government to give him much of a salary.

I went up with the clerk to see P'êng, who received me with great cordiality and invited me to breakfast. The breakfast I must say I did not altogether appreciate, though no doubt it was excellent from a Chinese point of view. The rice and cabbage were both eatable, but the lumps of fat pork were rather trying, and I had to go back to my tent and eat biscuits to take away the taste.

In the afternoon I moved up to the telegraph office, and soon afterwards Mr Jensen arrived. It was indeed a pleasure to meet a European and to talk English again. Mr Jensen had lived in Yün-nan since about 1886, and till the opening of Mêng-tzŭ as a treaty port in 1897 he remained the only non-missionary European in the province. He has in the course of his duties travelled many times along the main roads of Yün-nan, and many travellers who have passed through Yün-nan Fu are indebted to him for information and assistance, which he has been so ready to give. I should mention in justice to Mr Jensen that he was not responsible for the fact that the Yün-nan telegraph lines were out of order for nearly half the year. The upkeep of the line is in the hands of Chinese officials who embezzle the money which is intended for its repair. Mr Jensen was now on his way down to the Burmese frontier to connect the Chinese wire with our line at Nampaung.

I halted another day and went to call on the General, the chief civil magistrate, and on Yang, who had met me at Mien-ch'in. The magistrate had fever and I did not see him, but the General and his staff officer were both very civil, asked me to dinner, and returned my calls. The invitations to dinner I was rather glad to be able to excuse myself from on the plea of Mr Jensen's presence. Chinese dinners though well meant are rather a doubtful pleasure and last several hours.

CHAPTER VIII

T'ÊNG-YÜEH TO YUNG-CH'ANG FU.

Leave T'êng-yüeh—An argument with the mule-men—My Chinese escort—Chinese paved roads—The Shweli—Iron chain suspension bridges—The Panthays—Their rebellion—A high range—The Salween—Its supposed unhealthiness—Inability of the Yünnanese to live below 4000 feet—The Yüng-ch'ang plain—The town—Calls on officials—The Chinese language and system of writing.

On the 17th of January I started for Ta-li Fu, not without some delay and difficulty, for the mule-men who were natives of T'êng-yüeh were in no hurry to leave. They turned up late, made various excuses, and finally said that the loads were too heavy and refused to tie them on to the mules. Having heard and read much of how amenable the Chinese are to moral force and reasoning powers, I thought this would be a good opportunity to test this theory, and asked P'êng if he would kindly intervene. A few quotations from the classics ought to have ended the matter at once, but I was grieved to find that P'êng's arguments had not the smallest effect. He finally began to dance up and down, made some terrible threats of what he would do in the loudest voice he could command and retired discomfited into the house.

The mule-men were sitting calmly down, evidently considering the day was won, and the large crowd of onlookers who had collected thought they had had something worth looking at this time. There was evidently only one thing to do. I took up my stick amidst looks of incredulous amusement from the spectators, and gave the head mule-man one or two whacks over the back. This remedy acted like magic. The mule-drivers began to tie up the loads with smiling alacrity, and during the whole of the rest of the journey I had no further trouble with them. They

were only trying it on, and gave in at once with a good grace directly they found it did not answer.

It must not, however, be thought that I advocate an indiscriminate use of the stick. Nothing can be worse than thrashing a man without sufficient reason. But for the traveller in China it is to some extent a case of "every man his own policeman," especially in a place like western Yün-nan where at that time the nearest British Consul was at Ch'ung-k'ing, more than 1000 miles away.

I think there are two cases where a little physical force is desirable and even necessary, first if a man deliberately insults one, secondly if he refuses to carry out what he has undertaken to do. In the second case it is not the least necessary to hit hard enough to hurt him. I have found it quite enough just to show him that you are not going to be imposed on, and he accepts the situation at once. Chinamen who are not used to Europeans have such an opinion of their enormous superiority to us, that they are by no means pleasant people to get on with at first. Once let them know that you mean to have the upper hand, and it would be difficult to find more cheerful and willing men.

Mr Jensen was leaving the same day for Bhamo, so as our roads led in opposite directions we parted, to meet again, I am glad to say, in future years.

We were now out of unexplored country for the time. Our road from here on to Ta-li Fu is the same that has been followed by several travellers in recent years. Mr Baber's account of it is excellent. It is most interesting to read, and at the same time full of accurate information. His maps too are very good as far as they go, but unfortunately they are confined almost entirely to the actual road, so that one does not get from them an idea of the general lie of the country.

The road leads eastward across the T'êng-yüeh plain and ascends 2000 feet on to a range of hills, on the top of which it is a pleasure to find a considerable extent of open undulating country covered with grass and fern, a contrast to the usual knife-edge ridge of this part of Yün-nan. A steep descent took us to the village of Kan-lan-chai which lies in the valley of the Shweli, but at a considerable

elevation above the river. Here I was very comfortably put up in a *hsing-t'ai*, which is the name for the rest-houses specially reserved for Chinese officials travelling.

We were now travelling with an official escort, consisting of two policemen sent by the magistrate, and two soldiers sent by the General. It is the invariable custom in western China for Europeans to be supplied with an escort of this sort. Some travellers appear to look on them as a nuisance, but I have not found them so. Their presence is specially useful in parts of the country previously untrodden by Europeans, as it lets the inhabitants know that one is travelling with the sanction of the Chinese Government. Without this the people in some places are quite ignorant enough to suppose the traveller to be the leader of a gang of robbers, or perhaps a fugitive from justice. On one occasion between San-si and T'êng-yüeh, my interpreter was asked quite seriously by an old countryman whether we had come to invade China.

Also I have found the escort very useful in getting rooms at an inn, and in various other small services which they are usually glad to perform, with the anticipation of course of a small reward at the end. The arms they carry are not of the sort to give one much respect for the Chinese army. Generally it is an old muzzle-loader, sometimes only a sword or a three-pronged spear. An opium-pipe is a necessity for most of them, and it is a common saying among the Chinese that this is the only weapon their soldiers know how to handle, the word *ch'iang* being used in Chinese for both a gun and an opium-pipe.

This day's march was my first experience of a Chinese paved road. The stones are of all shapes and sizes, with large spaces in between them, and the road seems specially designed to render both walking and riding equally unpleasant. The sharp stones hurt one's feet, and one slips down on the flat ones. To make things worse there were one or two showers of rain, which made the stones so slippery that the mules could hardly keep their footing. Wherever it is possible to avoid the paved road, tracks have been made alongside of it, by which one can get along at a fair pace.

These roads exist all over China, and I suppose the

total length of them must run to some hundreds of thousands of miles. When new they may be fairly good, but they are seldom repaired, and the Chinese proverb well describes them as "Good for ten years, and bad for ten thousand." It is always a great relief to get into some out-of-the-way part of the country where there is only what the Chinese contemptuously describe as an "earth road." These paved roads have their uses however in the rainy season, as the stones prevent the path becoming an impassable morass.

On the 18th January we crossed the Shweli by one of the famous iron-chain suspension bridges. There are a considerable number of these bridges in western China, especially in western and southern Yün-nan. The chains, which are usually ten or twelve in number, are solidly embedded in massive piers of brick or stone on each side of the river, and the roadway is made by planks laid across these. Loaded animals can cross them, and though they sway about a good deal, they will stand a lot of weight.

The river is some 40 yards wide, with a strong current running over a rocky bed. It does not come from any great distance, and in a subsequent journey I was able to fix the position of its source approximately. There is no actual flat plain in this part of its course, but to the west the slope is very gradual to the foot of the steep part of the hills three miles off, and there are numerous Chinese villages both up and down the valley. The river is called by many names. To the Burmese it is known as the Shweli, to the Chinese as the Lung-ch'uan Chiang, or more commonly as simply the Lung Chiang or Dragon River. The Shans call it the Nam Yang in the upper part of its course, but change its name to Nam Mow when it enters the Möng Mow plain.

From the river there is a stiff ascent, at first through the usual dried up grass and fern, and higher up through bamboo and tree jungle. We camped at the little Panthay village of T'ai-p'ing-p'u at 7,400 feet, and had a very hard frost at night.

Panthay is the name which we have adopted from the Burmese for the Mahommedans of Yün-nan. The Chinese name for Mahommedans is *hui-tzŭ* or *hui-hui*. The name

Photo by Captain W. A. Watts-Jones

Iron-chain bridge over the Shweli

Panthay has become fairly familiar to Europeans from the great Panthay rebellion which was the means of devastating and depopulating Yün-nan from 1854 to 1873, in which latter year it was finally put down. The rebellion began in a quarrel between Chinese and Mahommedan miners, in which the latter thought, probably with reason, that they did not get justice from the Chinese official who investigated the case. The two races are never very friendly, and the Panthays were quite ready to take up arms in hopes of turning Yün-nan or part of Yün-nan into a Mahommedan state where they would be independent of Chinese officials. They had a very good try for it, and for some years they held the greater part of the west of the province, with Ta-li as the capital. Finally the Chinese Government, having, with Gordon's assistance, put down the Taiping rebellion, were able to turn all their forces against the Panthays. Ta-li was taken by the treachery of a Mahommedan officer, and the rebellion brought to an end with the usual slaughter of thousands of the rebels.

The two races naturally hate each other and always will do so, but there is no enmity observable on the outside. A Chinaman and a Mahommedan meeting will always be quite civil to each other. The Mahommedanism of the Panthays is really a very nominal affair, and I do not suppose that Mahommedans so ignorant of their religion could be found anywhere. This ignorance is no doubt partly due to their being isolated among a non-Mahommedan people, but I think also partly to their Chinese origin, for a Chinaman is not by nature a religious man. Though there is doubtless a certain amount of Arab or Tartar blood among the Panthays, they have far more Chinese in them than anything else. I imagine most of their ancestors were Tartars or Turkomans who came into the province with Kublai Khan's armies, but these men must have married Chinese wives. Also many of the present Panthays have their origin from Chinese children who have been adopted by Mahommedans and brought up in that religion. In some cases one can tell a Mahommedan by his features, but very often they are undistinguishable from the Chinese.

Along the main road from T'êng-yüeh to Ta-li there

is a considerable Mahommedan population, and they are found distributed all over the province, more in some districts than in others. Perhaps in Yung-ch'ang, Ta-li, and Yün Chou there is a larger proportion of Panthays than in other towns. Sometimes one finds Mahommedan colonies in very out of the way places, probably men who have taken refuge there after the suppression of the rebellion; and even in the Shan States within British territory there are two or three Panthay settlements.

No doubt the numbers of the Yün-nan Mahommedans were considerably thinned by wholesale massacres when the Chinese troops finally got the best of them, but I do not suppose they ever formed a very large proportion of the inhabitants of the province. At present I should say at a guess they would not amount to more than three per cent. of the total population. Mahommedans are distributed all over China, and I do not think there is any province which has none, but I believe the proportion in Yün-nan is greater than in any other province except Kan-su. It is often supposed that Chinese Mahommedans are more honest and straightforward than the real Chinamen, but from what I have seen of them I very much doubt if this is the case in Yün-nan: their customs and ways of thought are quite Chinese.

We had not reached the top of the range at T'ai-p'ing-p'u and our road on the 19th still led up till the Shweli-Salween watershed was crossed at a height of 8000 feet. The highest point of the range is a conical peak called Kao-li-kung which lies 10 or 12 miles to the north of the road and is some 12,000 feet high. The pass by which the road crosses is called *Fêng-k'ou, The Wind Pass*, and well merits its name. Here on each side of the road are stone walls which are said to have formerly supported an arch like those of the frontier "gates": this now forms the boundary between the T'êng-yüeh and Yung-ch'ang districts. I climbed up on to a little knoll to the north of the road to take some angles, and got an excellent view of the hills to the north, east and west: Tabu Pum and other prominent peaks near Sadon were clearly visible.

From the top we had a long bit of downhill to the valley of the Salween. The Chinese call this river the

Photo by Captain W. A. Watts-Jones

Coming down to the Salween valley

Lu Chiang, the Shans the Nam Hkong, and our name for it is a corruption of the Burmese name Than-lwen. It is crossed by another of the iron chain bridges, in this case of two spans, the only two-span bridge of this sort in the province as far as I know. The construction of the pier in the middle is assisted by the fact that the westerly span, which is 50 yards long only, crosses what is in the dry season chiefly shingle with a shallow stream running over it. The eastern span, 80 yards in length, crosses the main part of the river. The bridge has naturally been built at the narrowest place possible, so that 80 yards must not be taken as a fair estimate of the breadth of the Salween in this part of its course. Above and below the bridge its width varies from 100 to 160 yards. It has a fairly strong current and must be very deep in the middle.

At the time the bridge was under repair, and we had to cross by ferry two miles lower down. They were removing the stones of the pier to look at each chain and see whether it wanted replacing. The repair of the bridge is not undertaken by the Chinese Government, but is paid for by a subscription got up by the merchants of T'êng-yüeh. It was noticeable that the ferry was worked by five bamboo rafts specially constructed for the purpose: there is not a single boat in the plain. The Salween, like so many other Yünnanese rivers, is useless for navigation. There are quiet stretches where it would be quite possible, but the frequent occurrence of rapids would prevent boats from going more than a few miles.

We crossed the river and camped on the opposite bank at a height which my boiling-point thermometer made 2,200 feet, by far the lowest elevation anywhere in this part of Yün-nan. The climate was consequently at this time of year very pleasant, not hot in the daytime, and not too cold at night. The vegetation was entirely different from that of the country we had been passing through. Banyans, plantains, and other trees and shrubs peculiar to the warmer climates of Burma and the Shan States are to be found everywhere. The valley is in fact inhabited by Shans who call the plain Mong Hkö and are ruled by a sawbwa who lives a few miles below the bridge. This is practically the limit of the Shan race in this direc-

tion[1]: there are a few Shan villages to the north scattered up the Salween valley for a distance of 40 miles or so, but eastward no more of this race are now met with, though they doubtless did originally inhabit this country before it was taken by the Chinese.

European travellers have made a great deal of the unhealthiness of the Salween valley, but it must be remembered that all their information came from the Chinese. Now the Chinaman of Yün-nan lives in such a high-lying healthy country that in lower-lying places he is probably more liable to fever than a man of any other race. A height of 4000 feet or thereabouts is the limit below which the Yünnanese cannot live and keep their health, and this is the reason why the Shans have been able to retain possession of many of the rich plains of south-western China, while the few Chinese who live in that part of the country lead an uncivilized existence on the hill-tops. One seldom finds Shans living above 4000 feet, not that they cannot stand the climate, but because the Chinese *can* stand it, and have therefore dispossessed the original owners. In a few places such as Nan-tien, which averages a little under 4000 feet, one finds the two races living together, the Chinese slowly and gradually swamping the Shans.

The Salween valley is not considered more feverish than Mong Hkwan, Nam-hkam, and other Shan States. The Yünnanese avoid all these places from March to November, but the Shans continue to live in them all the year round, and in a subsequent journey I came across a colony of Ssŭ-ch'uan Chinese living in this same Salween valley only 40 miles above the bridge. I do not suppose the Lu-chiang-pa, as the Chinese call the plain, is exactly a health resort, but I expect its unhealthiness has been much exaggerated.

The Chinese say it is exceedingly dangerous to swim mules across the river, as there is a beast in it, which they describe as being like a blanket and full of mouths, which

[1] It is true that in a subsequent journey I discovered Shans in the north of Yün-nan and even in the Tibetan part of Ssŭ-ch'uan, but in such small and isolated communities as to be scarcely worth counting, except as a curiosity. See p. 378.

Photo by Major C. H. D. Ryder

Iron-chain bridge over the Salween

sucks animals down as they cross. Our mules were fortunate enough to get across without encountering this monster. It is perhaps hardly worth any naturalist's while to come out to investigate this strange animal. A Chinaman likes to have a story to account for anything that takes place. In the spring and early summer there would be a good deal of melted snow in the water of the river, while the climate of the valley would be extremely hot and close. The sudden change from hot air into cold water might well produce cramp.

The next day, a good up-hill road brought us to P'u-p'iao, a little plain covered with villages and well cultivated with the winter crops—beans, wheat, and opium. On this march there is an alternative road to Yung-ch'ang, branching off from the village of Fang-ma-ch'ang; it is said to be shorter but more hilly than the main road which I took. Gill travelled by it, but Baber and most other travellers have come by the same road as myself. Baber mentions that he heard that the stream which runs through the P'u-p'iao plain falls into a lake, but the answers to all my enquiries were that it joins the Salween. On the Chinese map there is a small lake marked a few miles lower down, but it is shown as the source of a small tributary of the main stream.

Our road on the 21st rose to the top of a bare range at 7000 feet, and a little beyond this the Yung-ch'ang plain came in sight. The path descends to the plain at the village of A-shih-wo, just before reaching which a cave is passed in the hillside to the left which is said to go right through the hill and come out on the other side.

The plain of Yung-ch'ang Fu is about 18 miles long and six miles wide, covered with villages and well cultivated; it is one of the largest and richest in the province. As in many other plains there is a summer crop of rice, and after the rice has been harvested in the autumn, the winter crops of beans, opium or wheat are put in. A good-sized stream running from north to south irrigates a great part of the plain, and water for this purpose is also collected in reservoirs where some of the side streams run down from the hills.

I put up at an inn in the middle of the town. The

accommodation in a Chinese inn is rough, but quite comfortable enough. One gets a small room with a table and a chair or two, and a plank bedstead. Going to an inn saves a lot of trouble, as the traveller can get firewood and hot water at once without difficulty, and also corn and straw for the mules. In Yung-ch'ang I found I was not bothered by the crowd, and was left alone as much as if I had been in my own house. This is by no means the case everywhere, and the inn yard is often densely packed with spectators. When this happens I should recommend the traveller to get an upstairs room where, as far as my experience goes, he will be quite free from molestation; it is in any case far easier to kick a man downstairs than to clear an inn yard which may have more than one entrance.

The town of Yung-ch'ang Fu I estimate to contain about 5000 houses. It was apparently originally a square, built at the foot of a little knoll which forms the end of a spur running down from the range to the west. It seems, however, to have struck some Chinese tactician that an enemy on this hill might make it unpleasant for the garrison of the town, and the northern and southern walls have been extended and bent round so as to meet each other and enclose this little knoll, though even with this the town still remains commanded at short range from the spur beyond. The flat part of the town is about half built over, the rest of the space being taken up with gardens. On the hill there are a few temples built among fir woods, and I actually put up a cock pheasant here within the city wall. This little hill is called Pao Shan and it is from this that Yung-ch'ang takes its *hsien* name of Pao-shan Hsiên.

The main bazar street which runs from north to south down the centre of the town is crowded all day and every day, but from the appearance of the place and from enquiries made, I do not think it is as large a trade centre as T'êng-yüeh. It is an excellent place for buying provisions: oranges, pears, pine-apples, carrots, cabbages, beans, radishes, and potato-like roots are to be got here, and doubtless several other sorts of vegetables and fruits at other seasons. They also sell cured ducks and geese, not unlike ham, but very salt; this industry is chiefly in the

Photo by Captain W. A. Watts-Jones

A crowd of sight-seers

hands of the Mahommedans, who eat the cured birds as a substitute for the forbidden ham, of which Chinamen are so fond. What surprised me most was to find excellent sponge cakes sold here, and I subsequently found that these are to be got in all towns of any importance. The pears are enormous in size, but are more what we should call cooking pears, and are better stewed than raw.

I called on the Hsien and asked him to put me in communication with some of the leading merchants so that I might hear their views as to a railway to Kun-long. One merchant turned up and I had a talk with him, but I had unfortunately mentioned the same subject to the Fu. The consequence was that in the evening he sent to ask if my interpreter might go and see him. He told the interpreter that there were a lot of Panthays near Kun-long, the settlement of Pang-long amounting to 4000 houses (an enormous exaggeration), and that if the railway was made to Kun-long, the Panthays of Burma would join with those of Pang-long and raise rebellions in China. It does not follow that these are the views of the higher officials in China, but it is a good instance of the suspicious way that many of the Chinese look at things that he should consider the railway project as a deep-laid scheme for injuring China. The Fu has a great reputation for learning and is, I believe, a graduate of the Hanlin College. After this it is needless to say that I saw no more merchants.

Calling on Chinese officials is not a very amusing performance. Not that they are not civil. I only in one instance, which I will relate hereafter, met with any discourtesy. But their ideas and ours are very different, and I always wondered which of us was most bored by the interview. Besides, talking through an interpreter is always trying. In subsequent journeys, when I knew more Chinese, I used to speak to them myself sometimes. The usual result was that they could understand what I said but I could not always catch their answers. No man is allowed to be an official in his native province, so that one never hears the provincial peculiarities of the Yün-nan speech from any official in that province.

These provincial differences in the Mandarin dialect are not usually pronounced enough absolutely to prevent

Chinamen from different Mandarin-speaking provinces from understanding each other, but are quite enough to puzzle a foreigner with only a slight acquaintance with the language. What is usually called the Mandarin dialect by Europeans (*kuan hua* in Chinese) is the official language of the Empire and is the language of the whole people in fourteen out of the eighteen provinces. Only in Kuang-tung, Fu-chien, eastern Chê-chiang, and the southern half of Chiang-su are other dialects heard.

These southern dialects are fairly numerous, and men from different parts of the same province may often be incomprehensible to each other. The difference between the Mandarin and these dialects is perhaps about the same as the difference between French and Spanish, that is to say that though they are nearly related to each other, the pronunciation of the words is so different that a Pekingese and a Cantonese cannot understand each other at all. The written characters are however the same, and men speaking quite different dialects can correspond with each other without difficulty. The reason of this is that Chinese is not written with an alphabet like most languages, but each character is a word, meaning some thing or some idea. Thus the character 福 would be pronounced "fu" by a Peking man, and "hok" by a Fu-chien man, but the meaning "happiness" would be the same to both. 人 would mean "man" in every dialect in China, though pronounced "jên" in Peking, "nying" in Shanghai, "jin" in Amoy, and "yan" in Canton.

The Chinese system of writing takes a long time to learn, and would not be so easily applied to inflected languages as to a language like Chinese where words do not change, but it has some advantages which alphabetic systems do not possess. If such a system were in use in Europe, learning to read and write one language would be learning to read and write all, and the literature of all civilised nations would be common property. On the whole, however, its inconveniences certainly outweigh its advantages.

CHAPTER IX

YUNG-CH'ANG FU TO TA-LI FU.

Leave Yung-ch'ang—Chinese ignorance of topography—The Mekong—The Chinese New Year—Ch'ü-tung and Yung-p'ing—Four hilly marches—Lo-los—Yang-pi—The Ts'ang Shan—Hsia-kuan—Ta-li Fu—The Ming-chia—Industries—Missionaries—A New Year's festival.

On the 24th January we left Yung-ch'ang. The road goes up and across the plain and ascends the usual bare hills from its north-east corner, finally following the bed of a stream up a narrow gorge to the top of the range at 7,800 feet. From here there is a slight descent to the little village of Ta-li-shao, where I pitched my tent, and my followers found shelter in a temple. Ta-li-shao is not to be recommended as a halting place. There is no inn, and the hillside is so steep that it is not easy to find room to pitch a tent. Shui-chai which is a good-sized village is only two miles further on, and would have been a better place to sleep at.

The stream which runs down the Yung-ch'ang plain is shown on some maps as falling into the Mekong, but Chinese maps give it as a tributary of the Salween, and this I ascertained on a subsequent journey to be correct. Towards the south end of the plain the river does make an easterly bend, and this has probably led some former traveller to suppose it ran into the Mekong. The Chinamen as usual were very vague about it. One of those that I asked said it ran into the Mekong, but that I was perfectly correct in saying that it joined the Salween eventually, as the former river was a tributary of the latter! This is a good specimen of the geographical knowledge of the Chinese. It is curious that, while Burmans, Shans, Kachins and other tribes are such excellent hands at topography,

and can draw a good map with a stick on the ground, the Chinese should be so lacking in this faculty, and will give one all sorts of geographical information which is obviously incorrect.

Our road on the 25th led gradually down hill as far as Shui-chai. From here the descent is down a narrow gorge with precipitous crags rising on each side. The path is zigzagged or it would be impossible for animals. Finally a bit of more gradual down-hill along the hillside brings one to the Mekong which is crossed by another of the iron-chain suspension bridges, the chains on the right bank being fastened round short pillars of natural rock cut out of the hillside.

The river averages from 80 to 100 yards in width, flowing with a strong current which renders it quite unnavigable. It runs between wall-like hills which rise almost sheer for 1,500 or 2000 feet and then slope more gradually back to the tops of the ranges. There is absolutely no level ground in the valley. This is characteristic of this river during its course through Yün-nan. I have subsequently seen it in several places and have found it much the same everywhere. The elevation at the bridge I made 3,900 feet, 1,700 feet higher than that of the Salween. After crossing, a very stiff ascent brought us to the long narrow village of Sha-yang. It was the Chinese New Year's Eve, and every house had a young fir tree stuck up in front of the door. This is, I believe, the universal custom in Yün-nan, but it does not seem to obtain in eastern China.

New Year's Day is the great holiday of the Chinese year. It occurs during the months of January or February, but not on any fixed date in our calendar, for the length of the Chinese year does not correspond with ours. They have twelve months, six of them of thirty days and six of twenty-nine days, making 354 days in all. So to make it come right with the sun they have to reckon one of the months twice over every three years. The same system of an intercalary month is used in Burma, but the Burmese calendar does not correspond in other respects with that of the Chinese.

On New Year's Day all shops are shut and no business of any sort is done. The people all put on their best clothes, often hired from a pawnshop for the occasion, and

go out and pay visits to their friends. Spending the day paying calls does not sound very lively, but the Chinese are an extraordinarily sociable people and find great amusement in going to their neighbours' houses to talk and drink tea. Most people keep up the holiday for a few days, and there is not much business done for a fortnight after the New Year. It is quite contrary to Chinese custom to travel on New Year's Day, but both on this and subsequent occasions I found no difficulty in getting my Chinese followers to march. They were away from their own homes and had no friends in the place, so had no particular desire to stay and keep the New Year among strangers.

Our march on the 26th was as usual a hilly one. It began with an ascent of 3,300 feet and a descent of 2,300 feet. After that another spur of 600 feet had to be crossed into the plain of Yung-p'ing Hsien. The first village reached is Ch'ü-tung, which contains about 600 houses inhabited chiefly by Panthays. The inn here was an exceptionally good one, kept by a lady who had originally been Chinese, but having the bad luck in her youth to be in some town captured by the rebels, had been forcibly converted to Mahommedanism and married to a Panthay. This incident did not seem to have affected her cheerfulness. The Chinese very soon resign themselves to circumstances. Certainly in this case it had happened twenty-five or thirty years ago, so she had had time to get over it.

The plain of Yung-p'ing only measures some four miles by two. The main road does not pass through the town, which, though the residence of the official, is a smaller place than Ch'ü-tung. On this march the snow-capped range of mountains near Ta-li Fu was visible for the first time.

The next four days took us from Sha-yang to Yang-pi, over a country in which there is absolutely no level ground. Sha-sung-shao, a little village among pine forests, was our sleeping place on the first day. On the 28th we crossed the range which divides the Mekong from the Yang-pi river at a height a little over 8000 feet and descended to Huang-lien-p'u, which is built on a steep hillside shut in closely by hills on all sides. It contains a very good *hsing-t'ai* or Government rest-house, where we slept.

On the next day the Shun-pi Ho was crossed by an iron-chain bridge, and a big spur traversed to T'ai-p'ing-p'u, a village inhabited by Lo-los, who have however adopted Chinese customs and the Chinese language. This was the first time I had come across this widely-spread tribe, though in my subsequent travels I saw a great deal of them.

The original village of T'ai-p'ing-p'u was down at the bottom of a valley, and the road used to go through it, but a few years ago a heavy flood carried away many of the houses, and most of the inhabitants moved to the present site half a mile up the hillside.

On the 30th we crossed a range at 8,350 feet and descended pretty steeply to Yang-pi, crossing the Yang-pi river by another iron-chain bridge just before entering the town. This stream, which is not navigated, is here 40 or 50 yards wide with a strong current. The town is built in two bits, each surrounded by a mud wall full of breaches, and has a good many Panthays among its population. It is a place of no importance, and is not an official town at all.

From Yang-pi to Ta-li in a straight line is a very short distance, but between these two places lies the Ts'ang Shan, by far the finest mountain range of Yün-nan, except perhaps some of those in the Tibetan part of the province. Its height is 14,000 feet, and it is so steep that no recognised road crosses it. There is, however, said to be a track over it by which animals can be got through, and I was sorry that neither in this nor in a subsequent visit to Ta-li could I find time to explore this path.

The main road makes a considerable circuit to the south and goes right round the southern end of the range. It follows down the left bank of the Yang-pi river for 10 miles and then turns up its tributary the Hsia-kuan Ho to Ho-chiang-p'u, where we slept on the 31st. The Yang-pi river has a tremendous current, but it is nothing compared with the Hsia-kuan Ho, which is a rushing torrent covered with foam all along, running in a gorge between steep, bare hills, which rise some thousands of feet above it on either side.

Our road of the 1st February crossed this stream by a wooden bridge and led up its left bank all the way to the

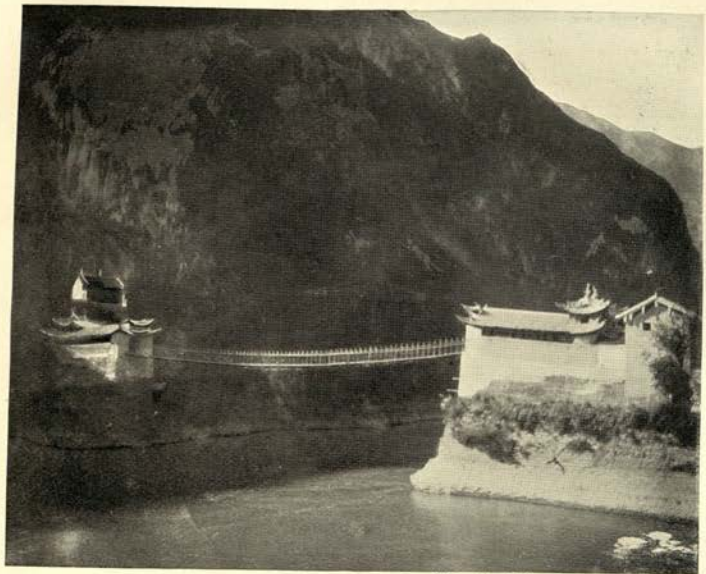


Photo by Major M. E. Willoughby

Iron-chain bridge over the Mekong

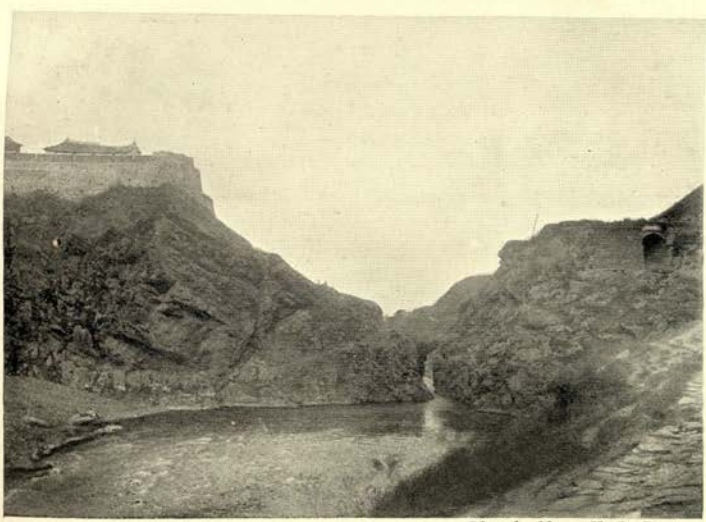


Photo by Major H. R. Davies

The Hsia-kuan Pass, near Ta-li Fu

town of Hsia-kuan. There is also a path up the right bank, but it does not seem to be much used. About a mile short of the town are the famous Hsia-kuan forts. Here for 500 yards or so the valley narrows in and the sides become precipitous. The gorge is closed by two archways, one on each side of the stream, which completely block the roads. On the right bank there is in addition a small stone block-house, and a stone wall runs along the bank of the river up to the town so as to flank the roads down either bank. The whole would be very effectual against an enemy who came along the road, but there is nothing in the world to prevent men climbing the hills on either side a mile before coming to the "gate" and thus getting round and coming down on it from above.

The Hsia-kuan Ho, which is from 20 to 30 yards wide through most of its course, narrows down at the point where the archways are to a width of scarcely more than six feet. There is a big stone laid across it here, which it is said has been crossed by venturesome individuals, but the sides leading down to it are so steep and slippery that anyone attempting this feat would probably tumble in and be drowned. The current here is tremendous.

Hsia-kuan is a prosperous commercial town with a population of perhaps 10,000. There is no official here. Ta-li is the official town, and Hsia-kuan the business town. All the merchants live at Hsia-kuan and not at Ta-li, which lies a few miles off the main road from Yün-nan Fu to Burma.

On the 2nd February eight miles of perfectly level road brought us into Ta-li Fu. The road is unfortunately paved and the stone being volcanic is unusually slippery and most difficult to ride or walk over. The plain is some two miles wide, with the Ta-li lake to the east and the Ts'ang Shan mountains rising 7000 feet above it to the west. Villages are numerous, and between the road and the lake the plain is well cultivated, but on the left of the road it is chiefly stones and graves.

Graveyards in China are not the enclosed churchyards or cemeteries that we are accustomed to. Each family has its own burying-ground, and they are often in most picturesque places in the hills among fir woods. Round every town

there are enormous tracts of country taken up by graves. In Yün-nan they are usually along the foot of the hills in ground which lies too high to be irrigated and cultivated.

On arriving at the town I went to the house of Mr Smith of the China Inland Mission, who very kindly put me up. The European population of Tali consisted of Mr and Mrs Smith and their children, two missionary ladies who lived with them, and M. Leguilcher, a French priest who had been some 40 years in the province.

Ta-li is built at a height of 6,900 feet near the foot of the hills which rise up to about 14,000 feet on the west, while a mile away to the east is the Ta-li lake, the official name of which is Êrh Hai. This lake is a fine piece of water 30 miles long and from three to seven miles wide, bounded on the east by low, bare, reddish coloured hills. It is full of fish and is navigated a good deal by small sailing boats, carrying passengers and cargo from one part of the plain to another. The origin of the name Tali I imagine to be the Shan words *ta li* meaning *good ferry*. This is only a guess on my part, but as Shans almost certainly once inhabited this plain and as there is still a ferry across the lake near the town this derivation seems probable.

The town is surrounded by the usual wall, which in this case is built of stone, and the population of the place is perhaps 30,000. The people in the town are Chinese with a good many Panthays among them, but the majority of the inhabitants of the villages belong to an aboriginal tribe who call themselves Pê-tsö, but whom the Chinese know as Ming-chia. These people retain their own language, and many of them can barely speak Chinese. Their women do not as a rule bind their feet, but in most respects they now conform to Chinese customs. They seem a quiet, peaceable, hardworking people, and in the winter some of them find their way as far as Burma in search of work.

One of the chief industries of Ta-li is the quarrying of marble in the Ts'ang Shan range. The stone is white mixed with black and various shades of grey, brown, green, yellow, and red. It is polished and worked up into representations of scenery which they say are natural, though I have heard this doubted, and it is possible that they sometimes use some stain to help the natural colours.

These slabs are then framed and are sent all over China to be hung up on the walls of houses as ornaments. The marble is also in much request for tombstones.

Silver bracelets and other things are also made in the town, but there is nothing remarkable about the workmanship. Gold is another somewhat important article of trade: it is usually beaten into gold leaf and sent in this form to Burma where it is in much demand for gilding pagodas. European goods come in through Bhamo, but they seemed very scarce, and were represented by a few cotton, calico, and woollen goods, needles, thread, and tinned milk. Some Tibetan products, chiefly furs and medicines, also find their way to Ta-li. Most of this is brought down in April, in which month a great annual fair is held here which attracts thousands of strangers who come in to trade from all parts of the province.

Ta-li is an important place from the official point of view. It is the residence of the T'i-t'ai, who is commander-in-chief of all the troops in Yün-nan, and of a Tao-t'ai[1], who governs a very large district including the whole of the western part of the province right up to the Burmese border.

I stayed two days in Ta-li hospitably entertained by Mr and Mrs Smith. The former was most kind in showing me all the sights of the place, which include several very fine temples. One of these on the road between Ta-li and Hsia-kuan was built in honour of Yang, the famous Chinese general who retook Ta-li from the Panthays and put an end to the rebellion. In it is an image of the great general himself, extremely well done, and the old man in charge of the temple told us it was an excellent likeness. He seems to have been a remarkable man, very short in stature but extremely energetic and not much hampered by attention to official etiquette, so much so that he would even walk about the streets, instead of being carried in a sedan chair. Military mandarins often rather affect this disregard of etiquette, and put on what they consider a bluff, soldierlike manner, talking in a loud voice and so on. Possibly many of them are not very conversant with all the points of correct Chinese deportment, as they are often men of low origin.

[1] This Tao-t'ai is now said to have his official residence in T'êng-yüeh.

Ta-li was the first place where I came across missionaries, but in subsequent journeys I met them in several places, and it was always the greatest pleasure to meet fellow-countrymen in these out-of-the-way spots. Some years later when I had the opportunity of visiting Shanghai and other treaty ports in eastern China I found a great prejudice existing against missionaries among some of the European merchant population. They are represented as men who have come out to China to better themselves, who live in good houses, are highly paid, and enjoy a life of comfortable idleness, always ready to leave their missions and take up any more lucrative occupation that may be offered them.

I am not prepared to defend every missionary in China, and it is possible that such men do exist, but I am convinced that they are, as far as those missionaries are concerned who work in the interior, rare exceptions. Their pay is small—indeed those who have private means receive none at all—and their furniture and food are of the plainest. To suppose they enter the mission as a money-making profession is absurd; and still more ridiculous to anyone who has travelled in the interior is the accusation that they lead pleasant, comfortable lives.

To live for years scores, and perhaps hundreds, of miles from any other European, surrounded by a population who cordially despise everything foreign, and in some places show their contempt in very disagreeable ways, is not the generally accepted idea of a pleasant life. Even travellers in China do not always find their path one of unalloyed pleasure, but they are always moving on and soon forget little unpleasantnesses. It is quite a different thing to settle down for years to an isolated life among the Chinese. Nor must it be forgotten that a missionary in the interior, far from gunboats and consuls, has always in the background the possibility of being rioted and perhaps murdered. The sad events of 1900 have shown that the risk to life that they run is by no means a small one.

As to their relations with the Chinese, they often find considerable difficulty in establishing new mission stations where the inhabitants do not know them and are consequently suspicious. Once established, their relations with

the respectable inhabitants are generally friendly and even cordial. It is true that beneath this there is in the minds of the Chinese a vein of suspicion, for it is difficult for a Chinaman to look on a European as the same kind of being as himself. But I do not believe that the bad feeling which exists in some of the more anti-foreign places is directed against him because he is a missionary, but because he is a European. The Chinese are not a race with any deep religious feeling, and are quite ready to let men follow whatever religion they please, but disinterestedness is rare among them and they consequently cannot understand men coming out to teach a new religion without any ulterior object. It is difficult for them to believe that it is not some insidious design of foreign governments to introduce western customs.

In the province of Yün-nan no great progress has so far been made in making converts, and they say the Yün-nanese are more difficult to convert than the people of other provinces. Moreover the English missionaries are generally very careful as to whom they allow to be baptized, and make it a rule to accept no man as a convert without a considerable period of probation. Whether their success in their own work be great or small, I believe that English missionaries, simply by living in the country, do a great deal to raise the character of Europeans in the estimation of the Chinese. To the Chinaman in his natural state, the European is thought of as an outer barbarian of grotesque appearance, scarcely belonging to the human race at all. An enormous majority of the Chinese have never seen any Europeans but missionaries, and on them therefore falls the task of trying to dispel these ideas. They wear Chinese dress and conform as far as possible to Chinese customs, so that in course of time the Chinese begin to feel that they are not an entirely different race of beings from themselves. Certainly I have found the people more civil and less inquisitive in places where there are missionaries than in places where there are none.

During my stay in Ta-li the curious festival called the Yin-ch'un was held. This ceremony is performed annually in Yün-nan about the time of the Chinese New Year. It consists in carrying an earthen representation of a man and

of a buffalo round the principal streets of the town for two or three hours. Inside the buffalo and the man are twelve little buffaloes and twelve little men, or should the year contain thirteen months, as it sometimes does, there are thirteen of them. The next day the two images are broken, and the little buffaloes and little men are taken out and one of each is presented to the principal officials and other leading men of the place, who have to make a money present in return. This ceremony appears to be a representation of the birth of the New Year. The particular colour that the man and the buffalo are to be painted each year is communicated officially from Peking.

The amount of snow to be found on the Ta-li mountains is a subject on which former travellers have differed, so I made enquiries about it. Mr Smith told me that the snow on the range is only visible from below during the winter months, but that in the deep ravines and crevices near the top of the range it is to be found all the year round, and it is brought down and sold in the town to cool water with in the hot weather. A little snow occasionally falls in the Ta-li plain, but it never lies long.

CHAPTER X

TA-LI FU THROUGH SHUN-NING FU TO KUN-LONG FERRY.

Routes to Kun-long—Mêng-hua—The Mêng-hua Lo-los—The Yang-pi river again—Shooting—A-lu-shih—The Mekong—Shun-ning Fu—An obliging official—The Shans—Yün Chou—A five-horned buffalo—Mien-ning T'ing—Gradual absorption of the Shans by the Chinese—Diversity of tribes—Mêng-yung—Mêng-sa—Rivers running through mountains—Snow peaks—The Nam Ting valley—Mêng-ting—Kun-long—A halt—Meeting with Captain Eliott.

My next object was to travel along the road leading from Ta-li to Kun-long ferry, to see if there seemed to be any chance of getting a practicable line for a railway between these two places, and to note the state of the present road and the amount of trade that went along it.

No one in Ta-li seemed ever to have heard of Kun-long, or at all events they did not know it by that name. But Shun-ning Fu would evidently lie in nearly the right line, so I determined to start for that place.

There are two ways of getting there from Ta-li, one the main road through Mêng-hua T'ing; the other crossing the north end of the Mêng-hua plain and turning off over the hills which lie to the west of it. The latter road is the shorter by one march, so I decided to go by it.

This, however, did not at all fall in with the ideas of the Ta-li officials. In China objections are always raised to a European traveller going by any but a main road. They sent a message to say that the road I proposed to follow was narrow and difficult, that nobody lived along it but savage Lo-los, that there were no places to put up and nothing to be got to eat. The traveller in China soon gets

used to hearing objections of this sort raised, and it did not make me change my mind.

On the 5th February we left Ta-li and went back to Hsia-kuan, and on the 6th started for Shun-ning. The road leads up a big range, reaching the top at 8,700 feet. They say there is usually snow on this pass at this time of year, but the winter happened to be an exceptionally mild one. From here a long winding descent brought us into the northern end of the Mêng-hua plain at the village of Hsün-chien, where there is a particularly good inn.

The plain is some 25 miles long and three or four miles wide, with a small stream, which is the source of the Red River, running southwards down the middle of it. Its height is about 6000 feet. The inhabitants are Chinese and Panthays, the latter being in considerable numbers but not in a majority. The town lies at the southern end of the plain, and I did not see it at this time, but passed through it in a subsequent journey in 1898[1].

Mêng-hua is celebrated in the ancient history of Yün-nan as the scene of a deliberately planned murder, by which the Nan-chao kingdom was founded. At that time central Yün-nan was divided into six little states, but Pi-lo-ko, the prince of Mêng-hua, being a man of enterprising mind, invited his five royal neighbours to a feast. He had previously constructed a specially inflammable house of pine wood, and having made his guests dead drunk, set fire to the building and burnt them all. He thus combined the six kingdoms under his own rule and soon afterwards moved his capital to the Ta-li plain. This was in A.D. 731, and the kingdom continued with various changes of dynasty till it was subdued by the Mongols in the thirteenth century.

The next morning the *ch'ai*[2] sent with me as escort divulged the fact that he was not after all to accompany me to Shun-ning, but was to go to Mêng-hua. It appears that the *Hsièn*[3] of Ta-li, after agreeing to send him with me to Shun-ning, had been subsequently struck by the great responsibility he was taking on himself in doing so, and had consulted on the matter with the *Fu*[4]. The result

[1] See p. 147. [2] Policeman. [3] Magistrate.
[4] The Fu district official, sometimes called the *prefect* by Europeans in China.

of their deliberations had been that the *ch'ai* was to go to Mêng-hua and report there that I had arrived in that district. So he accordingly went his way on to the town after a last ineffectual attempt to persuade me to go there too.

One of the village police from Hsün-chien came with us as far as Tien-chung-kai, where our route left the main road, and from there we had no difficulty in getting a man, also a village policeman, to show us the way across the hills.

The road led up to the top of the range at a low gap (7,500 feet), from here down a narrow valley with steep and in some places wooded hills on either side, and finally up half a mile of stiff ascent to the village of Wu-li-hei. I put up in a very comfortable house owned by one of the principal men of the village, who lets travellers sleep there for a consideration.

The inhabitants of the place are a tribe of Lo-los called by the Chinese Mêng-hua Lo-lo or simply Mêng-hua Jên (i.e. Mêng-hua men). Their houses are built of mud and stone, all packed very closely together, and there is nothing in the appearance of the place to distinguish it from a Chinese village. They have in fact taken very much to Chinese customs and the men dress exactly like Chinamen; they can all speak Chinese, and some of them can also read and write it. The women have retained their tribal costume. Their dress consists of a sleeveless blue coat, and a blue skirt with trousers underneath it, the skirt and trousers reaching only down to the knee. The Mêng-hua Jên still use their own language among themselves, and a vocabulary that I took down in this village will be found in the pocket of the cover. They seem very well off; their houses are large, and they own considerable numbers of mules, ponies, cattle, buffaloes, and goats. This particular branch of the Lo-lo family occupy the greater part of the hills of the Mêng-hua district.

For the next two days our road led us through a mountainous country, the hill-sides sometimes bare and sometimes covered with pine forests, the inhabitants principally Lo-los. At the little village of Lu-chu-t'ang we joined into the main road from Mêng-hua, and early on the 10th we reached Sha-sung-shao, the first village in the Shun-ning district. From here there is a long bit of

downhill passing a most remarkable temple, called Ch'a-fang-ssŭ, built on a ledge in a precipitous rock which rises sheer some 300 feet.

During this descent the Yang-pi River is seen on the left hand running most unexpectedly in a north-easterly direction. It makes a very sharp bend in this part of its course and afterwards again comes round into its original southerly direction. The Yang-pi is at the ferry 130 yards wide, with a moderate current, but a little lower down it gets squeezed in between the hills again, and becomes narrower, deeper, and more rapid. It is crossed by a rather shaky bamboo raft, and a few hundred yards of steep ascent brings one to Hsin-niu-kai, where there is a dilapidated official rest-house.

The people of this village are Chinese, not Lo-los, and from here on to Shun-ning the inhabitants are principally Chinamen. The height of the Yang-pi here is 3,900 feet, a fall of more than 1,200 feet from where we had last crossed it on the Yung-ch'ang-Ta-li road. The climate at this low elevation is much warmer than most places in this part of the country and the opium crop was nearly ripe, whereas at Ta-li and other higher lying plains it was only just showing above the ground.

The river in this part of its course is not known to the Chinese as the Yang-pi Ho. The people here seem to have no name for it but call it vaguely the Ta Ho or Big River. In fact the Chinese very seldom give names to their rivers, but call them after the nearest town or important village through which they pass. Nearly all rivers thus have different names in different parts of their course. This according to our ideas of geography is extremely inconvenient, so I have thought it best to adhere to the name of Yang-pi River.

I had had scarcely any shooting so far, but on this march I first had an unsuccessful stalk after two barking deer, and afterwards shot a hen pheasant (*Phasianus elegans*), one of nine or ten that got up.

On the 11th we had an uphill road, climbing the Ta-chin Shan, a hill with a conspicuous pagoda on its summit. We left this pagoda on our left hand and followed a narrow path cut out of an almost precipitous hill-side to the village

Photo by Captain W. A. Watts-Jones

Terraced fields in the Shun-ning Fu valley

of A-lu-shih, which contains 150 houses—a large place for this hilly country. It is inhabited by a people with the bump of curiosity very largely developed.

The next morning we crossed the top of a range at 8,400 feet and from there dropped 3000 feet in three miles to Sung-lin-t'ang, a very small village which contains however a fairly good official rest-house. During this descent the green-coloured water of the Mekong was occasionally to be seen in the deep valley below.

On the 13th a further descent brought us to this river at an elevation of 3,400 feet above the sea. The valley is of exactly the same character as where it is crossed on the Yung-ch'ang–Ta-li road, the river running in a deep gorge, with steep, almost inaccessible, hills rising up from it. There is not an inch of level ground outside the river bed, which is from 80 to 100 yards wide, and is pretty well filled up with water. The current is strong, and rapids numerous.

We crossed by an iron-chain suspension bridge of the same type as those previously described. It is built where the river passes between two precipitous rocks, is 75 yards long, and consists of a plank roadway supported by 14 iron chains, the ends of which are embedded in brick piers. At that time the bridge was a little shaky and swayed about a good deal as one passed over it, and there was a man posted there to warn travellers that only one animal must pass over at a time. After crossing, the road turns westward and follows the river bank for some distance before ascending steeply to Hsin-ts'un, where we put up for the night.

On the 14th February we crossed another range and descended to the town of Shun-ning, always pronounced Shun-ling by the Yünnanese. There is nothing to call a plain here, but a fairly level strip of cultivated ground, half a mile in width, runs along a little stream called the Pei-ch'iao Ho, and tiers of terraced fields rise again above this on each side.

The town is built on the west side of the valley, on the lower spurs of the hills, and is about 5,400 feet above sea level. It is an irregular shaped polygonal a mile in perimeter, surrounded by a 15 feet brick wall backed up on the inside by the usual earth parapet. The space within

the walls is fairly well filled with houses and contains some 600 or 700.

The whole town and district are very poor, a fact to which the broken bridges and unrepaired roads testify. There does not seem to be a single merchant of any importance in the place, and mules and ponies are scarce. In fact there appears to be absolutely no trade in the district except in the necessaries of life, and the whole way from Ta-li to Shun-ning we did not meet a single mule caravan, or even a pedlar on foot.

The city magistrate came to see me in the evening and was very civil. He was a Chiang-hsi man and much more inclined to be obliging than the majority of Chinese officials. I halted a day at Shun-ning and went to call on the mandarins. The magistrate had never heard of Kun-long himself, but he got out his map and sent for men who knew the country, and did his best to help me. It appears there are two roads, one through Chên-k'ang (Möng Cheng), and the other through Yün Chou and Mien-ning T'ing. The former was said to be the shorter, but is hilly and difficult. The Yün Chou route seemed to offer the best prospect of a possible railway line or trade route, so I decided to go by it.

There is only a very small garrison at Shun-ning. It was then commanded by an old white-moustached gentleman of 60, who had, however, only attained the rank of *Shou-pi* or lieutenant. So promotion is sometimes slow in the Chinese army. The military head-quarters of the Shun-ning district is at Mien-ning T'ing where there is a *Hsieh-t'ai* or colonel.

Shun-ning was originally a Shan state, and it is still known to Shans by its original name of Möng Hköng. It has now for a long time been a Chinese district, but the Shan or half Shan origin of the people is plainly visible in their features. So much like Shans did some of them appear to me that I stopped one man on the road and asked him if he was not a Shan, but he did not take it at all as a compliment, and his companions were much amused at the question.

One day at Shun-ning was quite enough, and I was glad to get out of the miserable one-storied inn in which we

Photo by Captain W. A. Watts-Jones

Bridge in the Shun-ning Fu valley

were lodged. Two days of easy marching down the valley of the Pei-ch'iao Ho brought us to Yün Chou. Though this town is 1,600 feet below Shun-ning, the descent is so gradual as to be hardly noticed. At the end of the second march the road passes through a gap in a spur and comes suddenly on the town, within 100 yards.

It is built at the junction of the Pei-ch'iao Ho with the Nan-ch'iao Ho, a somewhat larger stream which runs up from the south and eventually flows into the Mekong. The town is surrounded by a soft brick wall, 12 feet high, not kept in very good repair. It contains about 800 houses, and is a larger and more prosperous place than Shun-ning. The population includes a good many Panthays and they form the principal commercial element. The trade is not very large and is almost entirely confined to dealings with the Shan States of Mêng-sa, Kêng-ma, and Mêng-ting, and with the Panthay settlement at Pang-long in the Northern Shan States.

One of the principal articles of local produce is a curious kind of waterproof coat called *tso-yi*, much used by the poorer classes in Yün-nan. It is made out of the outer fibrous bark of a sort of palm tree, called *tsung-pao* by the Chinese. At the first glance it might easily be taken for the skin of some long-haired animal.

Yün Chou, like Shun-ning, was formerly a Shan state. Its Shan name is Möng Yü, and there are still a few families of that race living in the plain. The Yün Chou plain is much cut up by uncultivated spurs which run out into it, but good crops of beans and sugar-cane are grown. The latter is a specially valuable product in Yün-nan, as it will not grow in the higher and colder plains.

On the march from Shun-ning, at the village of Jê-shui-t'ang, I saw a most curious freak of nature, a buffalo with five horns. Two of them were of the ordinary pattern, the other three grew out of the centre of his forehead, two going straight up in the air close together, and the third sticking straight out to the front. The three superfluous horns had been sawn off rather short, but there was no doubt about the fact that they were there.

We left Yün Chou again on the 18th February and ascended gradually, reaching the Mekong-Salween water-

shed at 5,600 feet, one of the lowest points in this part of the range. From here we went by an equally gradual descent to T'ou-tao-shui, a little village in which a market is held every five days. The small official in charge of the police here came to see me in the evening somewhat the worse for liquor, and I saw three or four other men in the same state, rather an unusual sight in China. Most Chinamen drink rice spirit, but they seem to know when they have had enough, and one seldom sees a drunken man.

From T'ou-tao-shui there are two roads on to Kun-long. The most direct route passes through Mêng-lai, but I took a longer and better road round by Mien-ning. The next day we had an easy march to Yi-wan-shui, and on the 20th we slept at La-tien-p'o, a village which lies on the Mêng-lai Ho, the main source of the Nam Ting. Still following up this stream we reached Mien-ning T'ing on the 22nd.

Since leaving Shun-ning the country and climate had been gradually changing, and we were now in a district more resembling the Shan States than the higher part of China we had hitherto been travelling in. The elevations of the hills are much lower, the climate considerably warmer, and the whole country is covered with jungle of a semi-tropical kind instead of the bare hills and pine forests of the districts further north.

The Mien-ning plain is some seven miles long by three miles wide. The town is built near the southern end of it on the left bank of the Mêng-lai Ho, a stream 30 yards wide and three or four feet deep, which runs down the middle of the plain from south to north. There is a great deal of vacant space inside the walls, and the town contains only 200 houses, but it is surrounded on all sides by suburbs amounting to another 300 or 400. The largest suburb is on the east, and this appears to be the chief commercial quarter, such as it is. The inns are miserable, and I found quarters in a good-sized temple, built by the Ssŭ-ch'uan residents of the place.

Mien-ning is always pronounced Mien-ling by the inhabitants. It was originally a Shan state, and its proper Shan name is Möng Myen. There are still a great many of this race living here, but the Chinese are now in the majority, and the Shans are taking very much to Chinese

Plate XVIII

Photo by Captain W. A. Watts-Jones

The Wan-nien-chuang valley

dress and customs, and even to the Chinese language. It is quite probable that in another generation or two they will all call themselves Chinamen, and the place will afford another instance of the absorption of the Shan by the Chinaman in places which are over 4000 feet high, and are therefore healthy enough for the Chinese of Yün-nan to live in.

We halted a day at Mien-ning to rest our pack mules. There is no trade in the place to speak of. There are a few small merchants who occasionally go with small mule caravans to Mêng-sa and the other Shan States in the neighbourhood. In the morning I went up to the Shan monastery and saw the priest, a native of Mien-ning, who had ten years before been on a visit to Rangoon to worship at the pagoda. He was dressed in the usual unorthodox fashion of the Chinese Shan priests, with a yellow robe covering both shoulders, a red cap on his head, and Chinese socks and shoes on his feet, a contravention in three respects of the rules of Burmese Buddhism, which ordain that one shoulder must be bare, that no head-covering may be worn, and that no shoe must be used which covers the top of the toes.

Like many Chinese Shan priests he was an opium smoker and did not seem the least ashamed of it, as he got through three pipes while I was there. He told me that formerly the whole of this country was inhabited by Shans, but that now the Chinese were gradually ousting them. I noticed that even the priest himself, though he spoke Shan to me, would address his pupils in Chinese.

On the 24th February, 15 miles of somewhat up and down road took us to Ping-yüan-hsün. At the little village of Pang-mai which we passed on this march, in a pleasant valley covered with fir trees, is an isolated colony of Mêng-hua Lo-los, who emigrated from their own district a few generations ago. Their language I found to be nearly the same as that spoken at Wu-li-hei, but they are giving it up and are beginning to talk Chinese even among themselves. The women already tie up their feet in the Chinese fashion, and they will no doubt soon cease to call themselves Lo-los.

The next day, after three or four miles of level going,

we had a long descent of over 3000 feet to Wan-nien-chuang. This village is Chinese, but Se-pyek a mile further on is inhabited by Shans, among whom are included some Hküns, the branch of the Tai race who inhabit Keng Tung, one of the Southern Shan States.

There appear to be several Hkün families living among the Chinese Shans of this neighbourhood. How they had got here they did not seem to know. It may be conjectured that some rebellion in or invasion of their native state had compelled them to emigrate to such a distance. The Chinese name for this race of Shans is K'ên-tzŭ.

Wan-nien-chuang marks the boundary between the district of Mien-ning and the Shan State of Kêng-ma[1]. This is one of the largest of the Chinese Shan States and besides the Kêng-ma plain includes the districts of Mêng-sa, Mêng-yung and Mêng-chien[2]. We were now in a country in which there are very few Chinese. The plains are all inhabited by Shans, and the hills by Las, Lo-los, and La-hus, with a few scattered Chinese villages among them. The Lo-los are many of them of the Mêng-hua Lo-lo tribe. The Shans call them *Myen*, which is the usual Shan name for all branches of the Lo-lo race. The La-hus, called Lo-hei by the Chinese and Mu-hsö or Myen Mu-hsö by the Shans, inhabit a good deal of the country between the Salween and the Mekong, and stretch down into Keng Tung and northern Siam.

It rained a good deal in the night and the next morning, so we made a late start and did a short march of 7½ miles to Mêng-yung, a little Shan town of 180 houses surrounded by a mud wall. It is built on the right bank of a narrow stream running in a deep ravine. The plain is a very small one with little cultivation and contains no Shan villages except the town. I put up in a large well-built Shan monastery, and was an object of immense curiosity to the whole of the inhabitants of Mêng-yung.

Two marches from here brought us to Mêng-sa. The road there from Mang-hkü, where we slept on the 27th, after a little level going, begins to ascend up a narrow gorge by a paved road. Near the top it becomes steeper,

[1] Köng-ma in Shan.
[2] Möng Hsa, Möng Yawng, and Möng Kyen in Shan.

Plate XIX

Photo by Captain W. A. Watts-Jones

The Mêng-sa plateau

and after passing the Chinese village of Ch'ing-mên-k'ou suddenly emerges through a gap in the hills into the plateau of Mêng-sa[1], which is 10 miles long by two or three miles wide, very bare and dry with little water in it. There are few irrigated fields, and consequently not many villages. The small stream which waters the plateau comes in from the east close to the town, makes a bend round for two or three miles, and then runs straight into a range of hills, re-appearing again on the other side.

The disappearance of rivers into ranges of mountains is not at all an uncommon thing in Yün-nan and in the Shan States. I have seen four or five instances of it myself. One of the most remarkable occurs in the Taw-nio plateau near Kun-long ferry. Here all the streams run straight into a range of limestone hills, and come out the other side, crossing the Mêng-ting-Kunlong road, and falling into the Nam Ting.

Mêng-sa is surrounded by a mud wall and contains 150 houses inhabited by Shans. Just before entering the town a dirty Chinese suburb of 50 houses is passed through. The younger brother of the Kêng-ma sawbwa lives here and governs the district. The sawbwa's son was also there at the time of my visit. He had been to Möng Cheng (Chên-k'ang) to be married, and was now on his way home with his bride, accompanied by a large train of followers on horseback.

The sawbwa had very civilly sent a man to meet me and to go with me as long as I was in his territory. He asked me to go round by the town of Kêng-ma, but I wanted to see the direct road to Kun-long and could not spare the time to make this detour. I was able to pay him a visit later on.

Looking back northward from the Mêng-sa plateau some fine snow-covered peaks were visible at no great distance off, in the range running down the right bank of the Nam Ting. This range is far the highest in this part of the country, and on a subsequent journey I calculated its height as nearly 11,500 feet.

Leaving Mêng-sa the next morning we climbed a big

[1] Möng-Hsa in Shan. Not to be confused with another Möng Hsa, a name often given to the two states of Ho-hsa and La-hsa (see p. 26).

range of hills and on the next day dropped steeply down to the Nam Ting valley at Mêng-chien. During this descent we passed through the mixed La and Chinese village of Ta-chai. This contains 450 houses, and though it is a hill village is quite the largest place in this part of the Chinese Shan States. It has some very fine trees round it and the hillsides are well cultivated. It is noticeable that the Las and Was live in much larger villages than any other hill tribe of Yün-nan.

Mêng-chien or Möng Kyen is a small place of no importance, inhabited by Shans. Its height is only 1,850 feet, the Nam Ting valley being one of the lowest parts of Yün-nan. In this warm climate the fresh green grass was already several inches high, and our mules got better grazing than they had had for a long time.

On the 3rd and 4th of March our road was nearly level, leading down the Nam Ting valley, chiefly through pretty thick jungle, with occasionally a Shan village and a patch of rice cultivation where a tributary stream joins the main river. Finally we emerged into the Mêng-ting[1] plain, which is 10 miles long and three miles wide with the river running down its northern edge. There are several villages scattered about in it, each surrounded by fine clumps of bamboo. The people are partly Chinese Shans and partly Southern Shans, the former predominating; but the population is not very large and there is a good deal of land uncultivated. Mêng-ting is a very small state, and only the lower or western part of this plain belongs to it, the upper half being part of Kêng-ma. The town which is unwalled is built in two bits, separated by a small tributary of the Nam Ting, the sawbwa's residence lying on the right bank, and the market village on the left bank. During the dry season it is visited by a good many Panthay traders from Panglong, and I saw a large bullock caravan which had come from Nam-hkam with salt fish and cotton clothes.

I proposed to go and see the sawbwa, but a message arrived to say that he was ill and not up to receiving visitors. As a matter of fact there was nothing whatever the matter with him, but being of rather a nervous dis-

[1] Also called Hun-ting by the Chinese. Möng Ting is its Shan name.

Photo by Captain W. A. Watts-Jones

River running into a hill in the Mêng-sa plateau

position he did not want to run the risk of getting himself into trouble with the Chinese Government by being too friendly with a British officer. Many of these border chiefs have this feeling, and perhaps if they happen to be under an anti-foreign or reactionary official, there may be some reason for their fears.

The next day we crossed the Nam Ting by ferry at Hpak-cheo and camped at Hwe-hpyen, a little Shan village in the jungle situated at the junction of the Nam Hpawng and the Nam Ting. On the 6th of March we crossed the border into British territory and camped at Nam-hu, a small Shan village surrounded by forest.

The next day I rode over to Kun-long expecting to find two months of mail letters waiting for me, only to learn that the letters had arrived a fortnight ago, but that as the men bringing them could hear no news of me, they had started back for Lashio the day before. As they only had one day's start there seemed a good chance of catching them, so through the head-man of the village I got two men to go after them, promising big pay if they brought the letters within three days. This entailed halting at Nam-hu longer than I had intended, but the time was not entirely wasted, as our mules were showing signs of the work they had done and wanted a rest badly. Four days later the men returned but brought only two letters with them. The rest of my mails had gone astray and I did not get them till my return to Burma more than two months later.

Kun-long I had previously seen in February, 1888, when I went there with the first British column[1] that visited the place. It had not changed at all since then. It is merely a Shan village of 30 houses entirely surrounded by thick forest. Its height above sea level is 1,800 feet. The Salween is here 180 yards wide and is crossed by three small dug-outs. The road that crosses by this ferry was formerly an important trade route, but for many years it has been little used. Its decline dates, I believe, from the time that steamers began to run on the Upper Irrawaddy. Bhamo then naturally became the destination of trading caravans from Yün-nan, as they thus avoided the long journey through the Shan States.

[1] The Northern Shan Column, commanded by Major Yates, R.A.

I had intended to start again on the 11th March, but the evening before news came in that Captain Eliott, the Superintendent of the Northern Shan States, with several other officers was expected at Kun-long the next day. The opportunity was too good to be lost, so I halted one more day and rode out to Kun-long to see them, and to enjoy the pleasure of talking English again and hearing some news of the outer world. They had come from Theinni, and were going on through Tawnio, recrossing the Salween higher up.

CHAPTER XI

KUN-LONG TO SSŬ-MAO.

Routes to Ssŭ-mao—A land governed by no one—Back to Mêng-ting—The Las and Was—The Mon-Annam race—A hilly march—Buddhist Lo-los—A Chinese fort—Fighting with the La-hus—A thunderstorm—Mêng-ying—Ch'üan-lo—A La-hu chief—P'u-mans—The Mekong again—Shan dress—The Wei-yüan Chiang—Shans from Chiang-hsi—Arrive at Ssŭ-mao.

My next object was to find a road leading eastward from Kun-long to Ssŭ-mao, the principal trading centre of southern Yün-nan. The country between these two places was quite unexplored by European travellers, and I could find no Shan or Chinaman who knew anything about it. However it seemed pretty certain that the road must pass near Mêng-ko (Möng Kaw)[1]. To this place there are two roads —one starting from Ho-pang, a village near Nam-hu on the left bank of the Nam Ting, the other going back to Mêng-ting by the route I had just come and then branching off south-east. The former is somewhat the shorter, but is more hilly than the other. Along both roads it seemed likely there would be some difficulty with the Las, through whose country they lie. Not that these particular Las are head-hunters, but they were at that time independent, both of us and of the Chinese, and might very likely resent the intrusion of strangers into their country.

While at Nam-hu, I went across the river one afternoon to Ho-pang to interview the *Heng*, the small Shan official. It was market day there, and I came across a Pang-long Panthay, a man called Ting-êrh-ko, whom my interpreter knew, so we went with him to the *Heng's* house. He said the direct road was a fairly good one and that the Las along it were not considered bad Las. However when I asked him to give me a man or two to show me the way,

[1] Lat. 23° 15′, long. 99° 15′.

he began to make excuses, and evidently did not like the idea. I did not want to run the chance of making any trouble in a country part of which was nominally in our territory, so I determined to take the Mêng-ting road, which being much the more level of the two would be perhaps more likely than the other to become a trade route.

On the 12th March I left Nam-hu. The jungle here is full of pea fowl and jungle fowl, and within a few miles of Kun-long there is generally a herd of elephants to be found. We took the same road by which we had come and reached Mêng-ting on the 13th. The sawbwa sent a message to say that he would give me men to go with me to Mêng-ko, but warned me that the Las along that road had held a meeting a year or two ago and decided that no Englishman was to be allowed through their country, so that he (the sawbwa) would not be responsible for anything that might happen, and would recommend my taking the road round by Kêng-ma which was quite safe.

The sawbwa's willingness to send guides with me did not look as if he anticipated that I should have any serious difficulty, so I determined to stick to my intention to go by the Mêng-ko road. Accordingly the next day we started with an escort of two of the sawbwa's men, one armed with a gun, the other with a spear.

Two thousand feet of ascent took us to Man-hsak, a village containing a monastery and 50 houses, inhabited by people who said they were Shans but had decidedly La features. Those Las who have become Buddhists have rather a weakness for calling themselves Shans, and even the Shans themselves will often speak of them as Tai Loi or Hill Shans.

The Las and Was are found in considerable numbers in the hills throughout Chên-k'ang (Möng-Cheng), Kêng-ma, and the other Chinese Shan States which lie between the Salween and the Mekong. They also form the bulk of the population in the independent Wa country which lies to the south of this on the borders of China and Burma.

There seems to be no way of drawing a definite distinction between the La and the Wa. The wild Was appear to call themselves Wa, but I could not hear of any group of the race who call themselves La in their own language.

Photo by Major H. R. Davies

Kun-long village

The Shans usually speak of the Buddhist Las as Tai Loi, the non-Buddhist but fairly civilised tribesmen as La, and apply the name Wa to the head-hunters of the independent country. But this rule is not of universal application, for I found the inhabitants of a very civilised village near Mêng-mêng described as Was.

The Las, Was, and the cognate tribe the Palaungs, are no doubt originally of one stock, but are now split up into tribes differing much in degree of civilisation and in dialect. To get to the bottom of their tribal classification it would be necessary to discard the misleading appellations given to them by the Shans and Chinese, and to get from these people themselves their own names for the different tribes, and where the distinction between them lies.

If their language can be depended on as a guide, they belong to what has been named the Mon-Annam family of the Mongolian race, and are connected with the Talaings or Mons of Lower Burma, the Cambodians and the Annamese. This Mon-Annam family was probably the first Mongolian race to inhabit Indo-China, and the largest communities of them, possibly pushed southward by other tribes or possibly attracted by the more fertile plain country, drifted down to Lower Burma, to Cambodia, to Cochin China, to Annam, and to Tong-king where they founded powerful kingdoms.

In their movement towards the sea these people have left a regular trail of cognate tribes behind them. Beginning with the Palaungs in Yün-nan and the Northern Shan States, the line is continued by the Las, Was, and La-was down to the Talaings of Lower Burma, while in an easterly direction the Las continue through Keng Tung till they join with the Kha-mus and La-meits who spread out towards Tong-king and Annam. The Kha-mus of Chien Hkawng, the Stiengs, Mois, and other tribes of the same family carry the line down the Mekong to Cambodia and Cochin China.

Among the Las I came across in Kêng-ma and the neighbouring states, the men's dress was as a rule the universal dark blue of the Chinese and Chinese Shans. The women usually wear skirts striped with red, blue or white, and dark blue jackets ornamented with a little red

trimming and with shell ornaments hanging down the front. Their necklaces are very large plain rings made of silver.

In the wild Wa[1] country they wear little or no clothes and make a regular practice of going out on head-hunting expeditions, sticking up their trophies in double rows, forming an ornamental avenue in the neighbourhood of the village. My journey lay just outside the head-hunters' country. In fact the head of a European would form such a valuable and unique addition to a collection, that no Wa village would be able to resist the temptation to add such a trophy to their avenue. Even a Chinaman's skull is considered quite an acquisition, and the lucky possessors would expect to have better crops and to be more free from evil spirits than their less fortunate neighbours who could only show the ordinary Wa or Shan variety. The territory of the independent head-hunters I did not therefore enter, but even the more civilised Las I found apt to be suspicious and unfriendly. In some villages certainly they were pleasant enough, but I can remember three occasions at least when I have had some difficulty with them[2]. On the whole the Wa and La race seem to be a less pleasant people than the other non-Chinese races of Yün-nan.

Three more days of very hilly marching brought us to the Nam Tum valley at Man-hpa, a village which is built at the foot of a precipitous rock in a little side valley of the Mêng-ko plain.

To give an idea of the up and down character of this part of the country, here are the details of our march on the 16th. We started from Pangmaw (4,300 feet), went downhill to the Nam Kun (2,700 feet), ascended to 3,900 feet, descended again to 3,650 feet, rose to 4,700 feet, thence down to 4,400 feet, up again to 5,500 feet, and finally descended to Hseng-wa, 4,600 feet, all this in 13½ miles of road.

On this march we passed close to Pang-hung, the village which was said to be particularly hostile to foreigners. We even met some of the villagers on their way out to work their fields, but they appeared to have had no news of our

[1] For a very full and interesting account of the head-hunting Was by Sir G. J. Scott, see *Upper Burma Gazetteer*, Part I, Vol. I, p. 493.

[2] See pp. 108, 136.

coming, and were not prepared to act on the spur of the moment, so we passed quietly on after the usual Shan salutation, "Where have you come from?" had been given and answered on both sides.

On the range of hills to the west of Man-hpa we passed through two villages, Hkun-kaw and Pa-hka, inhabited by Lo-los who have adopted Shan Buddhism and have monasteries in their villages, the only instance I have ever come across of Buddhist Lo-los. The women's dress differs from that worn by those of their tribe who still inhabit the Mêng-hua district. In fact they have taken to dressing themselves almost, if not quite, like the La-hu[1] women, in black jackets, black skirts reaching to their knees, black cloth gaiters, and black turbans put on so as to leave a lot hanging down behind. For ornament they wear very large ring-shaped silver earrings.

Man-hpa lies a little to the north of the town of Mêng-ko (Möng kaw), while still higher up the Nam Tum valley lies Mêng-tung (Möng Tum). These two little Shan districts together with Mêng-sung (Möng Hsung), which lies a day's march further east, were formerly part of Kêng-ma. But, for some reason I did not learn, they quarrelled with the sawbwa of that state, and appealed to the Chinese mandarin at Chên-pien. The result was that this official took these districts over and governed them through a Shan chief who resided at Mêng-ko.

We left Mêng-sung on the 19th March and finding no village at a convenient distance camped out for the night on the banks of a little stream. Another 3½ miles the next morning brought us to the Chinese fort of Ai-shwai. This was one of several posts that had been established by the Chinese in this part of the country in the previous few years while they had been fighting the La-hus.

Formerly the Chinese Government did not trouble themselves about the wild tribes that inhabit this border tract, and they exercised very little authority over them. But since the annexation of Upper Burma they have adopted a

[1] It is possible that I was misinformed as to these people being Lo-los. They may have belonged to the cognate tribe of La-hus. The fact that they were Buddhists would however be equally remarkable whether they are La-hus or Lo-los.

much more forward policy, probably through fear of British encroachments—fears which are quite groundless, as this part of the country is of no value. The La-hus with their strong cross-bows and poisoned arrows made a stout resistance, and the Imperial troops were by no means uniformly victorious. But the Chinese Government, though they move slowly, are always eventually successful in their wars with less civilised tribes, and at the time of my visit most of the La-hus had submitted and the country seemed fairly peaceful.

The fort is built close to the La village of Ai-shwai and is surrounded by a high mud wall. The garrison was nominally 100 men, but there were really only 70 or 80, so that the officer in command might pocket the pay of the remainder.

I saw the lieutenant in command and went on, escorted by five of his men. A very steep up and down road brought us to the group of five La villages, which is called Nawng-hpaw by the Shans and Lung-t'ang-chai by the Chinese. Since leaving Man-hpa the country had changed a good deal. There was little or no thick jungle. The hills were bare and dry looking, and well cultivated by the Las and La-hus who inhabit them.

The next day we passed another Chinese fort. Its proper Shan name is Ho-sak or Nam-sak, corrupted into Nan-cha by the Chinese. Close to the fort was a small village with a wall round it, in which some of the married soldiers were living. Many of these had La-hu wives, and their principal occupation seemed to be growing opium. They will probably eventually settle down here as soldier-colonists, for it is from such colonies that much of the present Chinese population of Yün-nan has sprung.

I went in and saw the two officers. They complained that they were very much bored at having to live in this out-of-the-way place on the hill-tops, far away from all civilisation. They told me there had been a good deal of fighting about here a few years before, and that there had formerly been a large La-hu village at Nan-cha, which the Chinese had destroyed.

We continued our march the same day and had a descent of 3000 feet through fir woods. We had not gone

far before a tremendous storm of thunder and hail burst over us. Many of the trees had been cut half through by woodcutters and they came crashing down in all directions. One fell just in front of our leading mule, not missing him by very much, and blocking the path completely, so that we had some difficulty in finding a way round. In the evening we got down to Hsia-mêng-ying, and found shelter in one of the buildings of a very fine Shan monastery built on a terrace and surrounded by a paved court-yard. The town is a large one for this part of the world, containing 250 houses, chiefly built of mud, and inhabited by Shans.

Our quarters were so comfortable that I halted here a day to give us an opportunity of drying our clothes, which had been drenched through by the thunder-storm the day before. This little district is called Möng Nyim by the Shans. It is divided into two small plains along the same river, one called Shang-mêng-ying or Möng Nyim-nö, and the other Hsia-mêng-ying or Möng Nyim-taü. These names simply mean Upper and Lower Möng Nyim respectively. The district is really part of Mêng-lien (Möng Lem), a Shan state which formerly paid tribute both to Burma and China, but has now, by agreement with the British Government, become Chinese territory.

Möng Nyim, however, is now no longer governed by the Möng Lem sawbwa, but was at the time of my visit directly under the Chinese official at Shun-ning, though it was not then quite settled whether it was to remain under Shun-ning or to form part of the newly established district of Chên-pien.

Living among the Shans of this plain is a small colony of twenty Panthay families who have been here for four or five generations. They have intermarried with the Shans, and now talk Shan among themselves, but still keep up the Mahommedan religion and have a mosque in their village.

After a day's rest we went on to Shang-mêng-ying, a smaller place than the lower town, though it is in this upper plain that the sawbwa lives. Möng Nyim lies at an elevation of only 3,300 feet, so the next day we had to climb the usual range of hills and in five miles reached Nan-wa, the headquarters of Colonel Li who was in command of all the troops in this district.

I went in to see him and was most favourably impressed with him. He seems to have done a good deal in the pacification of this part of the country, and was much liked and respected both by his own men and by the Shans, La-hus and other inhabitants of the district. He wanted me to go round by Chên-pien as he said it was the best road, but I was too much pressed for time to make a circuit and decided to go by the more direct road through Ch'üan-lo.

Chên-pien T'ing is the new town that the Chinese have established as capital of the newly formed district of the same name. This district has been made up out of what were formerly parts of P'u-êrh and Shun-ning. But up till the last few years Chinese rule had been a very nominal affair in this country, which had been practically independent and split up into small states ruled by Shan, La-hu, and Wa chiefs. The new town is near Möng Lang, one of the districts of the Shan State of Mêng-lien or Möng Lem.

Colonel Li gave me an escort of eight men, among whom were four fine-looking Panthays who belonged to the Colonel's body-guard. We went on another six miles and camped out on top of the range at a height of 6,500 feet.

Two more marches brought us to Ch'üan-lo[1], which stands on a gently sloping terrace which extends about 1½ miles each way, and is well cultivated. The town is oval in shape, is surrounded by a mud wall and contains some 250 houses. It was formerly the capital of a La-hu state, till about 1891 the Chinese Government made it the civil headquarters of the newly established Chên-pien district. The offices were however soon afterwards removed to the present town of Chên-pien. This was found very unhealthy, and at the time of my visit there was some idea of moving back again to Ch'üan-lo. The Chinese magistrate of the place has the rank of *Hsün-chien*, which is inferior to that of *Chih-hsien*, but I found him very pleasant and civil and far superior in intelligence to many officials I had met of much higher rank. He had been for some time at Mêng-tzŭ, the treaty port on the Tong-king border, and had met Europeans there.

[1] Called Chen-lawt by the Shans.

The La-hu chief also still lives here and has a certain amount of authority. He is a quiet, simple-minded old gentleman, quite a jungle man. He told me that the Shans formerly inhabited this place, but four or five generations ago the La-hus came down from the neighbourhood of Mien-ning and drove them out. The Shans retired to Möng Lem, but there are still a few families of Shan descent living in the villages round.

The inhabitants of Ch'üan-lo and the neighbourhood seem now to be chiefly La-hus who have taken to Chinese customs, and who, many of them, now call themselves Chinamen. There are also a few real Chinese living in the town, but the total absence of curiosity among the people here soon made one realise that one was not among a Chinese population. Hardly a soul came to stare at me all day.

On the 27th of March we crossed a range of hills at a little over 6000 feet, and descended very steeply to the Mekong at the village of Nan-pei. The ferry village of this name where I camped is inhabited by La-hus, but the people of the main village of Nan-pei, which is 1½ miles short of the ferry, are P'u-mans, a tribe which is very much split up into small communities. They were apparently of the same family as the Las, Was, and Palaungs, but have become so scattered and isolated from each other that I have found some villages of them who have forgotten their own tongue and now talk the Wa, the Shan, or even the Chinese language.

The Mekong is here at an altitude of 2,300 feet, and runs, as usual with this river, between very steep hills with practically no level ground outside the river bed. I had great difficulty in finding room to pitch one small tent.

The next day we crossed the river in a large boat much resembling an English punt. At this time of year animals can be swum across, but in the rains the current is very strong, and this big boat is used to convey mules as well as men. The average width of this part of the Mekong is some 80 yards. Even in the dry season there is a fairly strong stream and the water is thick and muddy.

This ferry seems to be a good deal used. Quite a hundred mules crossed it while I was there, all carrying

salt from the Wei-yüan[1] salt wells to districts in Möng Lem and Keng Hung. From the further bank of the river a long bit of up-hill brought us within sight of the Mêng-pan plain lying three or four miles off to the north. Our road however did not enter it but descended in an easterly direction to Mêng-lêng, a village with a mixed population of Chinese and Shans.

Here I first came across another change in the dress of the Shan women. The jacket, which is dark or light blue, is folded back across the front like a low cut waistcoat, and is tucked inside the petticoat which is usually of a greenish grey colour but occasionally dark blue. This is fastened round the waist by a strip of cloth which is often bright red. The turban is dark blue put on in a round shape and is much smaller than that worn by other Chinese Shans. The earrings they wear are large plain silver rings. This dress I found universal in Möng Pan (Mêng-pan), Möng Ka (Mêng-ka), Möng Waw (Wei-yüan), and other places east of the Mekong. The dialect of these trans-Mekong Shans also differs somewhat from that spoken elsewhere.

The men's dress is the usual dark blue. It is a noticeable fact that among the non-Chinese tribes of western China it is the women's dress that forms the distinguishing outward sign of the tribe. The men of all these races, with few exceptions, dress very much alike, the dark blue coat and trousers of the pattern worn by the lower classes of the Chinese being almost universal.

The next day we reached Mêng-chu, a place of 100 houses in a small plain. It is now inhabited by Chinamen and Panthays, but its name indicates its Shan origin and it is still under the Shan sawbwa of Mêng-pan, who is subordinate to the Chinese official of Wei-yüan. There is a Chinese garrison here of nominally 80 men under a *Shou-pi.*

Two days chiefly through fir woods in a hilly country inhabited by Chinamen brought us to the Wei-yüan Chiang[2], a river 60 yards wide and in the dry season only knee deep. It runs down from the town from which it takes its name, and eventually joins the Mekong. Its

[1] Called Möng Waw by the Shans.
[2] Called Nam Waw by the Shans.

elevation here is only 2,500 feet, and the day was very close and hot with a thick mist which made surveying difficult. After crossing we ascended 1000 feet to Ch'ou-shui to camp.

The next day, 1st April, we crossed the river which, coming from the town of P'u-êrh, flows into the Wei-yüan Chiang a little below the crossing. It is here 30 yards wide and easily fordable in the dry weather. In the rains, however, it often becomes impassable, and, as there is no boat, travellers have nothing to do but to exercise patience and sit down on the river bank till the flood subsides. The hills about here were covered with wild raspberries just ripe, a yellow variety very common in the Shan States and in some parts of Yün-nan.

The next day we passed through the little village of Man-mu which is inhabited by Shans who came here from the province of Chiang-hsi seven generations ago. Their language is distinctly Shan, but it is a peculiar dialect and they have some difficulty in making themselves understood by the others of their race in the neighbourhood. They say they do not know why they came here and that they are the only Chiang-hsi Shans[1] in this part of the country. But they are quite positive that they did come from Chiang-hsi, which they describe as being three months' journey away.

That night we slept at the Lo-lo village of Na-ku and the next day, the 4th April, an easy march brought us into Ssŭ-mao.

[1] The Chung-chia of Kuei-chou are stated to be a mixture of Shan and Chinese, their ancestors on the Chinese side of the family having been soldiers who were natives of Chiang-hsi. It is possible that the villagers of Man-mu are Chung-chia who have emigrated here, but they did not tell me that they came from Kuei-chou.

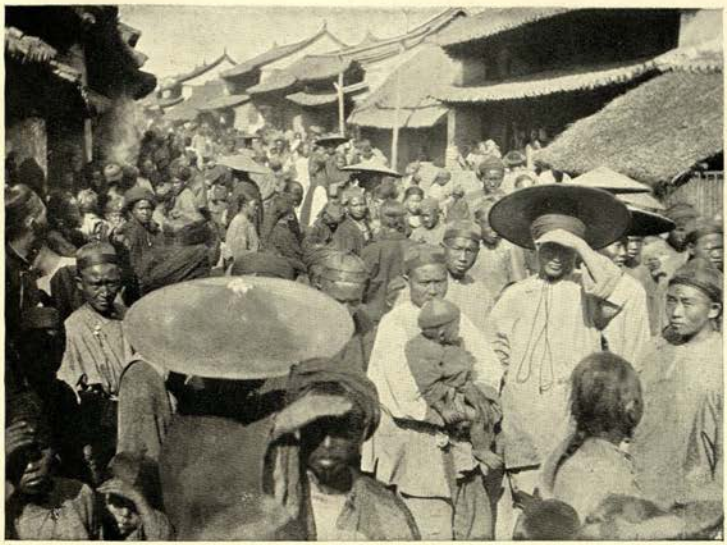
CHAPTER XII

SSŬ-MAO AND P'U-ÊRH.

The town and plain of Ssŭ-mao—A commercial centre—The famous P'u-êrh tea—Cotton—A treaty port—French travellers—A Tibetan caravan—The Ma-hei tribe—P'u-êrh—An official town—An uncivil official—A friendly Shan—Routes westward from P'u-êrh.

SSŬ-MAO T'ING was the first real Chinese town I had come across since leaving Mien-ning nearly six weeks before. It is built on the end of a low spur which runs down from the hills to the east of the plain and is surrounded by a 25 feet brick wall, about a mile in perimeter. Inside the city are some 1,300 houses, but the business quarter is in a large suburb of 1,700 houses outside the south gate. The plain is some 10 miles long by three miles wide, and is at an elevation of 4,800 feet. Like many other places in Yün-nan it was formerly a Shan state, and it is still known to the Shans by the name of Möng La.

It is, for Yün-nan, a large commercial centre, the trade being principally confined to tea and cotton, both of which commodities are brought from the Shan States which lie to the south. The tea, which under the name of P'u-êrh tea is famous for its good quality throughout the Chinese Empire, is grown in the hills from six to twelve marches south of the town, in the Chinese Shan State of Keng Hung, or Chiu-lung-chiang as it is called by the Chinese. The principal tea-growing centres that I could hear of are Yi-pang, Yi-wu, Yu-lo, Man-sa, and Man-la, all of which places are in Keng Hung territory to the east of the Mekong. The yearly output is estimated at 15,000 mule-loads, which would amount to some 900 tons. Its price averages about three pounds for a rupee (*1s. 4d.*). The value of the annual export would then, if these figures are correct, amount roughly to 670,000 rupees, say £45,000.



A crowded street in Ssŭ-mao

Photos by Major G. C. Rigby

Market in Ssŭ-mao

The tea is made up into disc-shaped cakes some eight inches in diameter and one inch thick, weighing about 12 ozs. These cakes, which are called *yüan*, are then put together in packets of seven, placed one on top of the other, and done up with strips of the outer bark of bamboo. This packet is called a *t'ung*, and it is in this form that it is usually sold.

According to my informants, seven-tenths of the tea goes to Yün-nan Fu and is from there distributed over eastern Yün-nan, Ssŭ-ch'uan, and other provinces. A good deal of the remainder is sent to Ta-li and other places in western Yün-nan, and to Tibet.

As to the cotton I did not get any details, but the trade is certainly a large one. The principal cotton growing districts are in the Chinese Shan States of Keng Hung and Möng Lem, and the British Shan State of Keng Tung. The greater part of Yün-nan is too cold to admit of this crop being cultivated, and as the whole population is clothed in cotton material, the trade in this commodity is one of the largest and most necessary in the province. Much of it comes from Ssŭ-ch'uan, whence it is imported both in the raw form, in yarn, and in cloth. Much Manchester and Indian yarn and some cloth also comes into the province from the Yangtze, from Bhamo, and from Mêng-tzŭ, the treaty port near the Tong-king frontier. But there is still a considerable trade in raw cotton from Burma *viâ* Bhamo, and from the Shan States *viâ* Ssŭ-mao. How long this import of the raw material will hold its own is a matter of doubt, as the superior convenience of the foreign yarn is making it yearly more popular, but there must always be a certain demand for raw cotton to be used in the padded coats so universally worn in cold weather.

I do not think that a railway or even a trade route has ever been proposed between Kun-long and Ssŭ-mao, but having been over this country by two different roads, I may say that I think a railway would be impracticable and useless, and I do not expect that there will ever be even a trade route. The country lying between these two places is very wild and mountainous, contains nothing that can really be called a town, and is sparsely inhabited, principally by hill-men who, whether Chinese or of other tribes, have

few wants beyond the necessaries of life which they already possess. The Ssŭ-mao tea is not of a flavour to suit the European taste, and its sale will always be confined to China and Tibet, so there is no prospect of a trade in tea between Ssŭ-mao and Burma.

I do not suppose that anyone ever has or ever will make a trading journey between Kun-long and Ssŭ-mao, as the latter place is much more easily reached from Mêng-tzŭ by a mule road of 15 stages. As no one has ever proposed a road from Kun-long to Ssŭ-mao, these remarks may appear unnecessary, but I think in such a little known country negative information may be of use.

Since my visit Ssŭ-mao has been made a treaty port[1]. A French and an English consulate and a Chinese imperial maritime custom-house have been established there. I cannot imagine it will ever be of any use to foreign merchants, and I believe this has been found to be the case, as the two consuls have been withdrawn. However, much better information as to Ssŭ-mao and its trade than anything I was able to get together in the short visit I paid the place should be now available from consular and customs reports.

It was on the 3rd April that we arrived at Ssŭ-mao, and I halted there the next day to see something of the town. It is certainly a very busy place at this time of year, and the large market square in the southern suburb was full of mule caravans going out and coming in. The people I found exceptionally friendly, and I was not followed about by the usual mob of sightseers. I went to call on the officials and found them very civil too.

One of the mandarins told me that some French travellers were expected here very soon from Tong-king. He only knew their Chinese names, so it was difficult to guess who they might be. Long afterwards I found out that they were Prince Henri d'Orléans and his companions M. Roux and M. Briffaud, who were passing through Ssŭ-mao on a journey which ended in a fine piece of exploration of the very wild country that separates China from Assam.

[1] A "treaty port" in China is a place where foreign merchants are allowed to reside. It is not necessarily a port on the sea or even on a river, though it is only of recent years that there have been any inland "ports" away from navigable rivers.

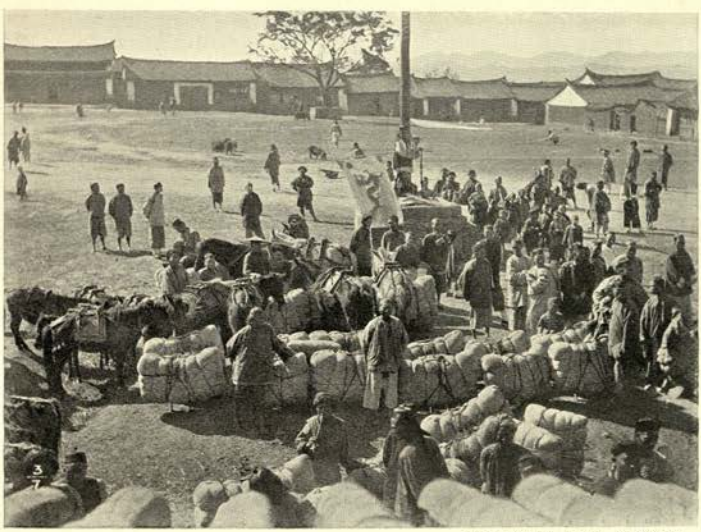


Photo by Major G. C. Rigby

A cotton caravan at Ssŭ-mao

From Prince Henri's account of his travels they must have reached Ssŭ-mao the day after I left it.

On the 5th April we started northward for P'u-êrh. The road, which is fairly easy, crosses a range at 6,300 feet and descends to Na-k'o-li, where we slept. A Tibetan caravan of 300 or 400 mules, all laden with tea, was on the road going the same way as ourselves. They were natives of the Wei-hsi[1] district, and told me that there would be an unusual number of Tibetans at Ssŭ-mao that tea season as there was to be a big festival in Tibet the following year, when it would be necessary to make presents of tea to the Lamas. At night they fastened all their mules up very close together and had ferocious looking dogs on long ropes tied up all round to guard against thieves.

I found these men very pleasant, and subsequent experience proved that Tibetans in China and Chinamen in Tibet always are very friendly. No doubt the feeling of being isolated in the midst of strangers knocks some of their natural bumptiousness out of them. I have heard Englishmen in Rangoon expatiate on the pleasant manners of the Chinese. Perhaps they would think less of their manners if they had seen the Chinaman in his own country. It is, however, fair to add that a great deal of the apparent bad manners of the Chinese is unintentional. It comes natural to them, and they are not in the least aware that they are bad mannered.

On this march I came across a tribe which was new to me. They call themselves Pa-hawng, and the Chinese name for them is Ma-hei. They are distinguished from other tribes as usual by the women's dress, which consists of a short black jacket with silver ornaments hanging down over it from their necks, and black trousers reaching down to the knee. They plait their hair into a pig-tail and wear no sort of head-dress. The married women have a piece of cloth round their waists which hangs down over their trousers[2]. Their language is of the Lo-lo type.

On the 6th April 12½ miles of a road, which would be good if it was not paved, brought us into P'u-êrh Fu, the most important official town, as Ssŭ-mao is the chief

[1] Lat. 27° 10′, long. 99° 10′.

[2] See Plate LXXII, facing p. 394.

commercial town, of this part of Yün-nan. It is surrounded by the usual wall and is said with its suburbs to contain 1,300 houses. It is the residence of the *Tao-t'ai* of one of the five administrative divisions of the province of Yün-nan, and also of a *Chên-t'ai* or General, but as a trading place it is of very small importance. Merchants usually avoid a town where there are mandarins of high rank. They prefer to live in a place of less position from an official point of view, where they will be less liable to be "squeezed."

I halted a day at P'u-êrh and went to call on the *Tao-t'ai* and *Chên-t'ai*, who were both very civil. On going, however, to the *Fu*, he had the rudeness to give me a seat on his right hand, a grave breach of Chinese etiquette, by which a visitor is always given the place of honour on the left. Not content with this, he proceeded to ask questions of my interpreter about me instead of speaking to me through the interpreter. There could be no doubt that his incivility was intentional, so I got up and left abruptly, plainly letting him see why I did so. The place one sits in seems a very trivial thing to us, but the Chinese attach great importance to such matters, and it does not do for the European traveller to be indifferent to these things. It could only have been meant as an insult, which it was one's duty to resent.

I must say I think this is the only occasion on which I found an official try this sort of thing on. A European passing through their district is of course always a nuisance to them and they cannot be expected to be really pleased to receive a foreign visitor, but I have usually found them outwardly quite civil.

After this I contented myself with sending my card to the rest of the mandarins. One of them, a colonel named Tao, came and returned my call. He was a Shan, not a Chinaman, and was of the family of the sawbwa of Möng Waw (Wei-yüan T'ing), but he had received a Chinese education and had made himself so useful to the Government that they had given him pretty high rank in the Chinese army. They have often made use of him when anything has had to be settled in Keng Hung or Möng Lem, and he has on two occasions come across our officials

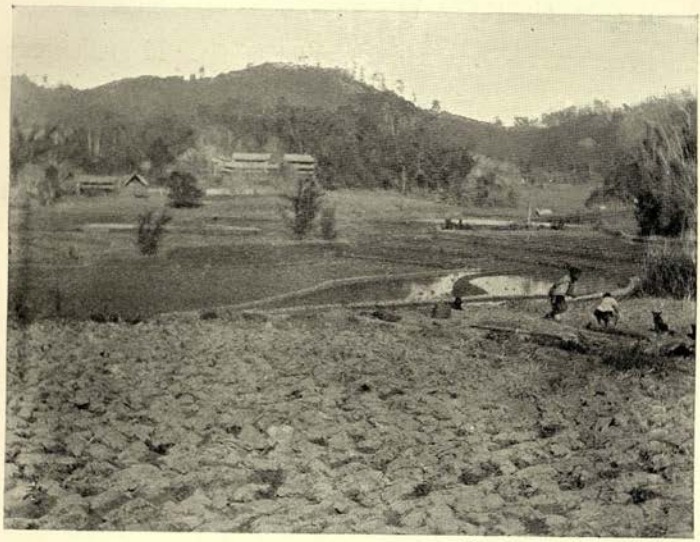


Photo by Major G. C. Rigby

Na-k'o-li

Photo by Major H. R. Davies

Shans at Wei-yüan T'ing

in the Shan States: in fact he had at the time just returned from meeting the Anglo-French Boundary Commission in Möng Hsing. Being a "barbarian," he had not the bad manners of the Chinese.

Having got to P'u-êrh I had seen the two roads leading from Kun-long to Ta-li and to Ssŭ-mao and P'u-êrh respectively. I had then intended to go through Shun-ning to Yung-ch'ang and then *viâ* Lung-ling to Bhamo. My orders, however, were to be back in Burma by the end of April or soon afterwards, and to make this round would have brought me well into June and into the middle of the rains. I decided therefore to take a road a little to the north of that by which I had just come, passing through Kêng-ma and thence to Bhamo by a somewhat roundabout route so as to keep in unexplored country as long as possible.

From P'u-êrh to Kêng-ma there are two roads, both meeting at Mêng-mêng. The shorter of the two passes through Mêng-chu and Mêng-pan, but this would lie very near the road by which I had just come. So I determined to take a somewhat longer and more northerly route *viâ* Wei-yüan and Mêng-ka, which would bring me through a country of which I had seen nothing before.

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CHAPTER XIII

P'U-ÊRH TO KÊNG-MA.

Road to Wei-yüan—A curiously built town—Salt wells—Mêng-ka—The Mekong at Ta-pêng ferry—The La-hus—Mêng-mêng—The P'u-mans—The Kêng-ma plateau—The sawbwa—Five-day markets—Variety of races—A native of Lucknow.

We left P'u-êrh on the 8th April, and reached Wei-yüan T'ing in five short marches. The country through which we passed is inhabited chiefly by Chinese with a few villages of Shans and Ma-hei. It is hilly of course, but perhaps the path is not quite so up and down as most Yün-nanese roads, though it certainly comprises an ascent of over 2000 feet from Mêng-nai to Yi-wan-shui, and a final descent of nearly 3000 feet into the Wei-yüan plain.

This town, which is called Möng Waw (i.e. mine country) by the Shans, is built in a plain some 12 miles long and three miles broad with the Nam Waw or Wei-yüan Chiang, a river some 80 yards wide but only three feet deep in the dry season, running down the middle of it from north to south.

The town is in three parts. First there is the original town, which is still surrounded by a brick wall but has now only a dozen small houses and one or two temples scattered about in it. Then there is the new town, which is built just to the north of and actually touching the old town, and is inhabited almost entirely by Shans, who form the bulk of the population of the plain.

Finally there is the Chinese quarter which consists of a temple and one street 500 yards long, built down close to the river bank. Here the Chinese officials and a few traders live. The reason given me for the abandonment of the old town was its unhealthiness, but why a new town built actually touching it should be more sanitary is difficult

to understand. The place was originally a Shan state but has now become a *t'ing* under a regular Chinese official.

After my experience in P'u-êrh I had rather made up my mind to give up calling on officials, but the Wei-yüan *T'ing* came to see me himself soon after I arrived and was very friendly. The principal product of the place is salt. There are several mines in the valley of the Wei-yüan Chiang, and there is a good deal of trade in this commodity with the neighbouring districts. The elevation of the plain is about 3000 feet and the place is considered feverish by the Chinese.

Two more days crossing a range at 6,300 feet brought us on the 14th April to Mêng-ka[1], which, like Wei-yüan, was formerly a Shan state and still has a Shan sawbwa, though the place is now incorporated in the Wei-yüan district. The plain lies somewhat higher than that of Wei-yüan and, though some 15 miles long, is much cut up by rather high-lying ground, which cannot be irrigated and is uncultivated and covered with jungle. Mêng-ka is not a place of any importance, and there is little or no trade in it. The population of the place is Shan, but in the town itself there is a Chinese bazar village, and a few families of Panthays also live here.

I halted a day to rest the mules and left again on the 16th. Our road took us gradually up a range of 7000 feet, from which there is a magnificent view of the surrounding hills and of the course of the Mekong valley, which can be traced for a long way. The next day a very steep descent brought us to the Mekong which we crossed by a large punt-shaped ferry-boat to the mixed Shan and Chinese village of Ta-pêng or Ta-pong. The river is as usual shut in by very steep hills. It is about 100 yards wide, with a strong current and full of rapids, so much so that in the rains the ferry is sometimes impassable for a few days at a time. Probably this is also the case with other ferries over the Mekong. The height of the river at Ta-pêng is 2,800 feet.

On the 18th we had a very stiff piece of climbing, reaching the top of the range at 7,400 feet. From here the

[1] Möng Ka in Shan.

road descends slightly and turns up another valley to the mixed Chinese and La-hu village of Man-nung[1], where there is an official with the rank of *Hsün-chien* and a guard of 10 Chinese soldiers. I put up in a good-sized temple, built to commemorate the names of the principal civil and military mandarins who took part in the fighting against the La-hus. At the time of my visit the La-hus had been completely subdued and there was no large Chinese garrison in this neighbourhood.

Two more days of hilly marching brought us to Mêng-mêng[2] on the 20th April. Since crossing the Mekong we had been again in a country in which the La-hus form the greater part of the population. This tribe is almost entirely confined to the tract between the Salween and the Mekong. Among them there is in this neighbourhood a sprinkling of Chinese and also some Was or Las. The Chinese and La-hus often live together in the same village, and the latter seem now quite reconciled to Chinese rule. Mêng-mêng is a Shan state which was formerly subject to Kêng-ma but is now practically independent, though they still pay a nominal tribute of gold and silver flowers. The plain is some seven miles long and inhabited by Shans except for one Chinese village, the people of which are emigrants from Ching-tung T'ing who came here five generations ago. The town is the largest Shan place anywhere in this neighbourhood and contains 400 houses. It is governed by a sawbwa who was at the time of my visit a boy of 17. The plain is well cultivated and the people seem fairly well off, but their prosperity depends on their rice fields; there is little or no trade in the state.

We left the next day, some of the Shan officials very civilly riding out with me two or three miles of the way, and then leaving me an escort of 10 men to go on with us to Kêng-ma. We camped for the night at Ya-sai, a village of 40 houses inhabited by Chinese and P'u-mans. These P'u-mans speak exactly the same language as the Las of this district, but they do not consider themselves as at all the same race as the Las, though they cannot offer any explanation as to how they have come to use the same

[1] Man-nawng is its proper Shan name.
[2] Möng Möng in Shan.

language. The fact seems to be that the P'u-mans have become so split up into small and isolated communities, that many of them have lost their own language. It was not till a subsequent journey in 1899 that I came across P'u-mans who had a language of their own[1].

On the 23rd April we arrived at Kêng-ma. The town is built in a plateau, a most unusual formation for this part of Yün-nan, where one generally finds nothing but a series of ranges of mountains and comparatively narrow valleys. The plateau measures about 15 miles from north to south and half this distance across. To the east, separated from it by low hills, is the Nam Hpyit[2], while two other streams run across the plateau in a generally easterly direction and find their way through gaps in these hills into that river. It is along these two streams and their small tributaries that the greater number of the villages are situated, as they are here able to cultivate narrow strips of paddy. Most of the plateau consists of open grass land, lying too high to be irrigated and not much cultivated.

The town is pleasantly placed on rising ground, and contains about 300 houses, built of mud or soft bricks. The climate is excellent, and I found it quite cool at this, the hottest time of the year, though the height is only 3,850 feet. The place seems prosperous, and there were a good many Chinese traders there, among whom I found the Panthay merchant whom I had seen in Yung-ch'ang[3]. He told me that since we last met he had spoken about the proposed railway extension to Kun-long to other traders, who all agreed that it would be an excellent thing for the trade of this part of China.

The sawbwa's son came to see me soon after my arrival. Having reached the age of 25, he had now taken over the government of the state, his father retiring in his favour. This is an almost universal custom among Chinese Shans. The father, however, still remains the nominal head of the state, and the son is not recognised by the Chinese Government until the father dies. Kêng-ma is one of the largest and best governed Shan States in the province of Yün-nan.

[1] See p. 146. [2] Nan-p'i Ho in Chinese. [3] See p. 59.

The next day I halted, and returned the sawbwa's call in the morning. The palace was not a very imposing structure but a new one was being built close to it. It was market day in Kêng-ma, and there was a very large attendance, including a good many Chinese traders selling cotton cloth, etc. Most of the European goods appear to come from Bhamo *viâ* Yung-ch'ang. The market is held every five days according to the almost invariable custom of Burma, the Shan States, and Yün-nan. Nearly the whole country-side comes into it to buy and sell, and on market day the roads are always crowded with people from the villages coming and going. It is an opportunity for them to display their best clothes, and in places where there are many different hill tribes the variety of costume is most picturesque.

In Keng Tung in the Southern Shan States, and probably in many other places, people of a dozen different races speaking a dozen different languages may be seen in one market place. The lingua franca by which they communicate with each other is generally Shan or Chinese or both, according to the locality. In Kêng-ma there was not any extraordinary variety of tribes. The people were chiefly Shans and Las, with a good many Chinese and a few La-hus. A native of India, a Lucknow Mahommedan, also came to see me. He was employed by the Panglong Panthays to teach their children Hindustani, Persian, and Arabic. He told me he had been there three or four years and had a great many pupils, and that the rising generation would most of them know Hindustani.

CHAPTER XIV

KÊNG-MA TO BHAMO *VIÂ* MANG-SHIH.

Route to Bhamo—The Nam Ting valley again—Lo-los who have become Chinese—Obstruction at Mêng-hung—A rabble army—The passport clears the way—The lawless population of Mêng-hung—The rebellion in Chên-k'ang—Basins with no outlet—The Salween at Han-kuai—Pin-ka and Hsiang-ta—The Mang-shih plain—A prosperous state—A travelled Shan—Supposed unhealthiness of the plain—Möng Chi—Möng Yang—Möng Hüm—The Shan dread of Kachins—Through Kachin villages—The hospitable sawbwa of Ho-hsa—Wild strawberries—Telegraph office at Man-waing—Arrival at Bhamo.

FROM Kêng-ma the shortest way to Bhamo lies chiefly through Burmese territory, but it was no use wasting my Chinese passport by going over well-known ground. I decided therefore to strike off in a north-westerly direction to Mang-shih, and so round by Man-waing to Bhamo, thus keeping in unexplored country as long as possible.

Leaving Kêng-ma on the 25th April, we crossed a range at 6,550 feet, and after a 17 mile march camped at a little village a mile short of Mêng-chien, the place which we had passed through on the 2nd March. The next day we forded the Nam Ting, and for two days marched through a hilly country inhabited by people who are really Lo-los by origin, but have taken to Chinese customs and now use the Chinese language even in talking to each other. We were now in the territory of a sawbwa whose state is called Chên-k'ang by the Chinese and Möng Cheng by the Shans. At the boundary the Chên-k'ang people had built a small fort commanding the road, with a garrison of 10 or 12 Chinamen to keep bad characters from entering their country. We camped at Lung-cha, a place where roads branch off to the town of Chên-k'ang and to Mêng-hung. I was taking the latter route, so my Kêng-ma escort left me here to go on to

Chên-k'ang and get fresh men sent across from there to meet me. The next day nine miles of very hilly going brought us to Ma-li-p'ing, a large village at an elevation of nearly 7000 feet, and consequently quite cool, almost cold in fact.

On the 29th I sent on early to Mêng-hung[1] to say I was coming, and about two miles short of the town I found a man waiting in the road. He had been sent out to ask me to go round by Chên-k'ang, as there were a lot of soldiers in Mêng-hung who had just returned from an expedition against some rebels. This would have meant a detour of two or three days, so I told him I could not do so and went on towards the town. My interpreter and myself rode on ahead of the mules, and soon came on the victorious army, a miscellaneous rabble of Las, Shans, and Chinamen, armed with guns and spears. An individual, who appeared to be some sort of officer, was sitting in the road and told us we could not go on, as the town was full of soldiers. I asked him who he was, but not getting any particular answer, rode on. He then followed us and said that if we persisted in going on he would get his men together and stop us by force. We took no notice of him and rode into the town without anyone hindering us. The proper headman was said to be away in Chên-k'ang, but finally an old man was produced. I showed him my passport, but no one had learning enough to read it, so my interpreter read it to them. After some consultation in their own La language they produced two men as guides, one of whom was half or three-quarters idiotic. Both of them said they did not know the way, so I went on without them, and told the old man I should report to the Chinese officials that I had shown my passport and been refused guides. I then looked round for the man who had threatened to stop us entering the town, but found he had disappeared about the time of the reading of the passport. We had no difficulty in finding the road by asking people we met, and we slept in a Chinaman's house at the village of K'a-fang.

Mêng-hung is a place of about 100 houses, surrounded by a wall. Its population is chiefly La, but there are a

[1] Möng Hom is the proper Shan name of this place.

good many Chinamen living there too, and most of the people appear to talk both languages. They are well known as the biggest blackguards in this part of Yün-nan, and many of them are wanted by the Chinese Government for murders and other crimes, but the country is so little under Chinese control that the officials are not very keen on trying to make arrests. On a subsequent journey I again had trouble at that very town[1], the only place in Yün-nan where I have ever encountered anything like organised opposition. Mêng-hung is in Chên-k'ang territory, but the sawbwa of the latter place finds it more than he can manage and has no real authority there.

The next day we reached Mêng-pun (Möng Pawn), a Shan village of 40 houses, not to be confused with Mêng-p'êng (Möng Hpawng), a somewhat larger place a day's march off W.S.W. In the afternoon a man arrived who had been sent by the Chên-k'ang sawbwa to guide us on to Mang-shih. There had been a good deal of rain lately, and it fell heavily here at night.

The recent fighting from which the warriors I met at Mêng-hung had just returned, was naturally the subject of conversation everywhere in this neighbourhood, and from enquiries made at different places I gathered the following as to its origin. About the year 1890 the late sawbwa of Chên-k'ang was going round his state, and while at the village of Ya-k'ou, which lies two or three marches south-west of the capital, he was murdered by his nephew Tao-lao-wu, who usurped the sawbwaship. He, however, only held it for a few days, as a Chinaman called Ma, who lives on the hills near Hsiao-mêng-t'ung (Möng Htawng), and is one of the principal head-men of the Chên-k'ang state, got some men together, marched on the capital, killed Tao-lao-wu, and dispersed his followers. The present sawbwa, who is the son of the murdered man, and was at that time only two years old, then became the nominal ruler of the state.

Since then the adherents of Tao-lao-wu had been constantly dacoiting in the western part of Chên-k'ang, near the Burmese border. The Chinese authorities accordingly

[1] See p. 136.

gave orders that the sawbwas of Chên-k'ang, Kêng-ma, and Mêng-ting, were to collect men and combine against the rebels. They seem to have been successful in dispersing them for the time, though I could not hear of much loss of life on either side. This is the story as given me, but, though there is nothing improbable in it, I will not be answerable for its correctness. A Chinaman always has a story to account for any circumstance he may be asked about, with an equally ready answer to any further questions that may be put to him.

The next day we continued our journey, crossing a range at 6,800 feet. On the top there are several basins, two of them of considerable size, with villages in them, the water of which has no outlet, the streams running into holes in the hills. In one of these, in which the village of T'ien-pa-chai is situated, the hole is not big enough to take all the water which comes down when the stream is swollen, so that in the rains a small lake is formed where it enters the hill.

On the 2nd May we had a steep bit of down-hill to the Salween, which is here 2,050 feet above sea level. We crossed it at Han-kuai ferry, which is just below the corner where the river begins to make its westerly bend. The Salween is here 120 yards wide with a strong current, and is crossed by one good-sized ferry-boat. The boatmen live at Han-kuai village, which is on the right bank, nearly 2000 feet above the river, up a very steep hill—an inconvenient arrangement for travellers arriving from the east, as they have to wait till the ferrymen choose to come. The usual custom is to fire a gun to attract their attention.

The next day a very hilly march, passing Möng Nawng[1], a small Shan plain with a swampy lake in it, brought us to Pin-ka, a plain five miles long, inhabited by Chinamen and under the jurisdiction of Lung-ling. Two more days of hilly marching in wet weather took us to Hsiang-ta, another little Chinese plain containing about 15 small villages, and on the 6th of May we descended to Möng Hkwan, an important Shan state, called Mang-shih by the Chinese.

The plain is watered by the Nam Hkwan, a tributary

[1] Mêng-nung in Chinese.

of the Shweli, and is some 12 miles long by eight miles broad. It is full of villages and well cultivated, and is one of the largest, and quite the richest, of the plains inhabited by Chinese Shans. The town, like all the other villages of the plain, is so surrounded with bamboos and with banyan and other trees that it cannot be seen till one is close up to it. It contains 500 or 600 houses, well built of soft bricks in the Chinese style, and most of them have tiled roofs. The sawbwa's new palace is a very fine building, occupying a considerable part of the middle of the town. There is also a large monastery, and the whole place wears a greater air of prosperity than any Shan town I have ever seen. There has been a mud wall round it, but this is now all broken down. One of the sights of the place was a panther, which the sawbwa kept shut up in a cage just outside his palace. It was said to have been caught on the hills which overlook the plain. I have occasionally seen panther's tracks in Yün-nan, and no doubt they exist in many places in the province.

I was put up in the old palace, which was occupied by the sawbwa's uncle, who then had more to do with the management of the state than the sawbwa himself. He was a very pleasant-mannered and intelligent man, apparently about 50 years of age. He had travelled all over the Chinese Shan States, and had visited Ta-li Fu and Yün-nan Fu. I sent my card to the sawbwa, and he returned the call in person. He was considered too young to govern the state, and his uncle was at that time officially recognised as regent by the Chinese authorities[1]. The sawbwa had just been to Rangoon to worship at the big pagoda, and seemed much pleased with his visit.

The height of Möng Hkwan is about 3,350 feet, and it is considered too unhealthy for Chinamen to live in except in the cold weather. A good many Chinese traders come here in the winter, but they all go away in March or April. The guide who brought us down from Hsiang-ta went back home at once; nothing would induce him to sleep the night in the plain. However we were for several days in these comparatively low-lying Shan States, but none of my China-

[1] The young sawbwa assumed the government of the state himself soon after my visit.

men suffered from fever at all. These places are doubtless somewhat feverish, but the Chinese exaggerate their unhealthiness.

The next day we followed the plain down for some distance and then turned in a westerly direction over some grass land into Möng Chi, a district of Möng Hkwan lying along the narrow valley of the Nam Chi. The Chinese call it Hsien-kang.

On the 8th we climbed a range to a height of 6,500 feet, when at about nine o'clock it came on to rain very heavily, so, finding a large temple in the Chinese village of Ho-t'outs'un, we stayed there for the night. On the 9th we descended to Möng Yang, another Shan district which forms part of the state of Möng Ti or Nan-tien. It consists of a plain seven miles long, lying along the valley of the Shweli, which is called the Nam Yang by the Shans in this part of its course. The river is here 60 yards wide, and is at this time of year easily fordable by men, but is just deep enough to wet the bottom of mule loads. Möng Yang is called Hsiao-lung-ch'uan by the Chinese; its height is 3,300 feet.

The next day we had a steep climb up a range 5,400 feet high and an equally steep descent to the valley of Möng Hüm, called Lo-pu-ssŭ-chuang or *the four turnip farms* in Chinese, also a district of Möng Ti. This narrow plain we followed down for the rest of the day, passing numerous Shan villages full of large flocks of ducks and geese, which feed in the sandy shallow bed of the Nam Hüm. We slept at Ung-lön, almost the last village in the plain. The headman here said he would give me no guide to Ho-hsa (Hu-sa) as the people were all afraid of the Kachins along the road. Luckily there happened to be two Ho-hsa men sleeping in the same monastery at Ung-lön, and I had no difficulty in getting them to act as guides, as they were going the same way themselves. Our road climbed to a height of 6,350 feet, passing the large Kachin village of Pang-sang. On top of the range is a lot of open grass land, and the road winds about in this for some miles, till the Möng Wan[1] plain comes in sight below. The road,

[1] Called Lung-ch'uan by the Chinese, or sometimes Ta-lung-ch'uan to distinguish it from Hsiao-lung-ch'uan (Möng Yang).

Photo by Captain W. A. Watts-Jones

Yang-jên-ch'ang, on the road from Nam-paung to Man-waing

however, does not go down to it, but turns in a more westerly direction to Ning-kram, a Kachin village of the Maran tribe. The Kachins were somewhat surprised, as they naturally did not expect to see a European travelling about here, but I had no difficulty in convincing them that it was quite a friendly visit. The last time we had come across Kachins was on the 11th January, the day that we marched into Chan-hsi (San-si). This race is only met with near the Burmese border; they do not extend any distance into the interior of Yün-nan.

Our road the next day crossed the Nam Wan a mile or two above the head of the Möng Wan plain and then passed over another range of hills into the Ho-hsa valley. I had sent on to say I was coming and was most hospitably received by the sawbwa, who was then living in his old capital at Se-kow. I found a good many spot-billed duck in the flooded rice fields here and also saw one snipe.

I could not spare the time to accept the sawbwa's invitation to stay on here a day or two, and started again the next morning, accompanied for part of the way by his eldest son. The range between the Nam Wan and the Taping is crossed at 7,400 feet. Here I found a very nice sort of white wild strawberry growing, quite different from the tasteless red variety that one usually finds in this country. We descended into the Taping valley and crossed the river at Nawng-hsai ferry: it is 500 yards wide here, but at this time of the year not more than half the bed has any water in it and it is shallow enough to be fordable. We slept the night at the Shan monastery at Man-waing or Man-yün. Since my last visit, telegraphic communication had been established by Mr Jensen between T'êng-yüeh and the Burmese frontier, and I found a telegraph station established here and was once more in touch with the outside world.

On the 15th of May we reached the frontier fort of Nam-paung, and in two more marches did the 32 miles which separate this post from Bhamo.

CHAPTER XV

BHAMO TO T'ÊNG-YÜEH.

Expedition to survey railway line—Division of our parties—Leave Bhamo—The Taping valley—Chan-ta—Kan-ngai—Nan-tien—Tibetan beggar pilgrims—Hostile reception at T'êng-yüeh—Refuge in the yamen—Calls on officials—The use of long nails—Meet my old interpreter—Causes of hostility of mob—Effectually quieted by the officials—Longitude by telegraph—Climate of T'êng-yüeh.

IT was not till 1898 that I got another opportunity of travelling in Yün-nan. The importance of railway communication in China had by this time begun to be recognised, and the Yün-nan Company had been formed with sufficient capital to make a preliminary survey, to test the practicability of a line from Burma to the Yangtze. By an arrangement with the Government, British officers were to be employed in this work, and I was asked to take charge of the expedition.

We were divided into two parties. Captain E. Pottinger, R.A., with Lieutenant C. G. W. Hunter, R.E., and Mr Tucker, went to Shanghai, and ascending the Yangtze began the survey from the eastern end of the proposed line. Lieutenant W. A. Watts-Jones, R.E., and myself started from Burma and worked eastward. Mr J. Turner and Mr J. S. Ker, two civil engineers working for the Yün-nan Company, also belonged to our party; and the Survey of India, besides supplying us with four surveyors, also sent out Captain C. H. D. Ryder, R.E., with a survey party.

Watts-Jones and I arrived in Burma early in November 1898, and it was arranged that Turner and Ker, who had some other work to do first, should meet us near Kun-long ferry at the end of December. My former interpreter not being available, I engaged a new man—Huang-hsin-chai by name.

Ryder, Watts-Jones, and myself all left Bhamo together on the 16th November and went by the usual road to

Photo by Captain W. A. Watts-Jones

A Shan village in the Kan-ai plain

Man-waing[1]. The trade along this route is fairly large in the cold season, and we passed some 500 mules, loaded chiefly with walnuts, chestnuts, pears, dried figs, and a little silk and tobacco.

From Man-waing on to T'êng-yüeh is a well-known road, previously traversed by several travellers, and described in detail by Dr Anderson in his *Mandalay to Momien*, though the learned doctor gets rather mixed in his names of places.

Ryder and Watts-Jones took the main road which crosses the Taping by one of the numerous ferries over this part of its course, and goes up that river's left bank. I took a somewhat longer route round by Chan-ta[2] where I was hospitably entertained by the sawbwa, and rejoined the rest of the party at Chiu-ch'êng (Old city), the former capital of the Kan-ai[3] state. The present town is off the main road in between the two branches of the Taping just above where they join. Here lives the long-bearded sawbwa with whom we had been so friendly on our expedition to find the boundary "gates," and I was sorry I could not spare the time to go and see him.

Our route so far, after leaving Man-waing, had lain through a plain several miles wide, well cultivated with rice fields, and full of prosperous Shan villages, the part on the right bank of the Taping being Chan-ta territory, and that on the left bank Kan-ai. The capital of the latter state is near the head of the plain, and above this, steep bare hills close in on the Nam Ti, the Shan name for the eastern Taping, the valley of which the road follows up.

In fifteen miles or so the valley again opens out into the comparatively narrow plain of Möng Ti, or Nan-tien as the Chinese call it. This is also a Shan state, but the climate being cool enough for Yün-nan Chinamen to live in, they are gradually settling there, and the population is now nearly as much Chinese as Shan. The sawbwa rules a large extent of territory including Möng Yang and Möng Hüm, and I believe he is also in charge of Chan-hsi, though of this I am not quite certain.

In this plain we passed an encampment of wandering

[1] See p. 30. [2] San-ta in Shan. [3] Möng Na in Shan.

Tibetans who had apparently come out on a religious pilgrimage, binding themselves to get their living by begging. In this they seemed to have been very successful, as many of them were walking about with ducks under their arms. The same day we met my old friends P'êng and Colonel Liu, who had been with Mr Warry and myself on our first trip through Yün-nan. They were on their way to Nampaung to meet our boundary demarcation party.

After leaving the Nan-tien plain our road still lay up the Nam Ti valley, but over an open rolling down country, crossing the river twice by stone bridges, and finally descending slightly into the town of T'êng-yüeh.

Here a very warm reception awaited us. Our baggage and servants had got ahead, and we found them surrounded by a hostile mob. The innkeepers had absolutely refused to let them in, and our Shan escort of two of the Nan-tien Sawbwa's men were naturally afraid to do anything in the face of a crowd of Chinamen.

Guided by one or two of the more friendly of the inhabitants we made our way towards the *T'ing's* yamen[1]. Our road lay right through the middle of the town, so getting the mules and servants in front of us, Ryder, Watts-Jones and myself came on behind as a rear-guard. The mob, increasing every moment, followed us, yelling, hooting, and throwing stones. When they pressed us too closely, we three who were riding would turn round and charge them. We had the satisfaction of catching one or two of them over the head and arms with our sticks, but they were wonderfully quick in getting away and the whole street would for a moment be almost clear, the people having disappeared into houses or down side streets. Then each time, as we turned round and went on after our mules, they would reassemble almost as quickly as they had vanished, and stones and bricks would again begin to fly about. In this somewhat unpleasant fashion we rode through T'êng-yüeh, and were very glad to reach a temple inside the *T'ing's* yamen where we were safe from the mob and found accommodation for ourselves and our animals.

We had I think all been hit by stones, but no one was

[1] i.e. the district magistrate's house.

Plate XXVII

Photo by Captain W. A. Watts-Jones

Iron-chain bridge over the Nam Ti

seriously hurt. The affair was not an organised riot, as they did not know we were coming. It may be taken in fact more as a way of showing their dislike to those who have had the misfortune not to be born Chinamen, and as an expression of opinion that foreigners would be better advised to stay in their own country. Still this sort of thing may easily grow into more serious rioting, and I am strongly of opinion that Governments should take notice of even the smallest incidents of this kind where their subjects are the victims of attack by Chinese mobs.

It was unfortunate that our baggage had got ahead of us. Had we been there ourselves and insisted on being let into the inn, breaking in by force if necessary, we should have had no further trouble. A show of physical force at the outset is very effective in dealing with Chinamen. This is the only time that I have been stoned in a Chinese town, and in most places in Yün-nan the mob though inquisitive are not actively hostile.

Soon after our arrival my friend Yang-fa-yung who had on my previous journey met me at Mien-ch'ing, came to see us. He apologised for the conduct of the mob, said that he would have protected us if he had known we were coming, and that orders had been given out which would ensure us from any recurrence of such a thing. The loud voice and bluff military manner which this gallant officer assumed as in keeping with the character of a soldier, caused us much amusement.

The next day we called on the *T'ing*. We found him very civil and friendly and he apologised for the occurrences of the day before. He treated us to sweet biscuits and green chartreuse, so he is evidently making progress in his knowledge of Western customs!

What most struck my two companions, both new to China, was the length of his nails which, according to the custom of the literary classes, had been allowed to grow an inch or more beyond the tips of his fingers, to indicate that he was under no necessity to do any work with his hands. This custom may appear to us somewhat inconvenient, but we were soon to learn that it has its uses, for a fly having fallen into Watts-Jones's chartreuse, our host dipped his nail into the glass and deftly scooped it out!

Staying with the *T'ing* I was very glad to find Wang, who had been magistrate at Shun-ning when I passed through there three years before, and had done much to help me in finding a road to Kun-long. He was now governing the neighbouring district of Lung-ling.

In the afternoon Ma-ko-li, my former interpreter, came to see me. He was employed in the Northern Shan States and was at the time on leave in T'êng-yüeh. He believed the hostility of the lower classes of T'êng-yüeh to be due to the recently concluded treaty by which that place was to be opened to foreign trade. The traders and mule drivers have an unfounded, but perhaps not unnatural, idea that the bread will be taken out of their mouths by foreigners. Their natural mistrust of everything foreign prevents their seeing that an increase of trade is likely to bring more work and more prosperity to all classes. We also heard that some European travellers who had passed through T'êng-yüeh in the last year or two had made themselves unpopular, but probably the said travellers have another side to the story.

We halted two days in T'êng-yüeh and walked about the town accompanied by a single policeman, without any molestation and without being even followed by a crowd, so the mandarin's orders had evidently been effectual. In the evening Ryder went to the telegraph office to take a longitude. He had previously arranged with Captain Pirie of the Survey of India to be ready at Bhamo for this purpose. A longitude taken by telegraph from some fixed point is more accurate than one obtained by any purely astronomical means. Latitudes are easily obtained with sufficient accuracy for practical purposes, but the determination of longitudes in countries that have not been triangulated is always a difficulty.

The mode of operation was as follows. First four observations, each of three stars to the west and three to the east, were taken with a theodolite to get the error of the watch. Then six series of five taps on the telegraph instrument were sent from each end, the exact time of sending and receiving each tap being carefully noted both by sender and receiver. To complete the operation six more stars were observed to again get the error of the watch, and thus, by noting its rate of gaining or losing, to

The T'êng-yüeh mandarin and his children

Photos by Captain W. A. Watts-Jones

A quiet street in T'êng-yüeh

find the exact time at the moment of the mean of all the taps. The difference between the mean of the times of sending the taps and the mean of the times of receiving them would, when corrected for the error of the watches, give the difference of time, and therefore the difference of longitude.

Subsequently, in this and the following winter, we took the longitudes of several other towns and by thus getting a few fixed points have I hope added materially to the accuracy of the map of Yün-nan.

The climate of T'êng-yüeh at this time of year we found extremely pleasant. It froze every night and was quite cold all day. Should a railway ever be made from Bhamo, it would be easy to find an excellent sanatorium for the people of Burma in the neighbourhood of T'êng-yüeh.

CHAPTER XVI

THE UPPER SHWELI AND THE SALWEEN.

We split up and take different roads—Our surveying instruments—Hsi-lien—Good climate and beautiful country—A sheep and mule breeding village—Potter's wheel—Iron works—"Foreign devil"—The Hsi-lien plateau—Ma-li-pa—Iron mine—The Li-sos—Wolves—Ming-kuang—Lead and copper mines—The Shweli Valley—Description of bridge—Paper making—Mat making—A practicable line from T'êng-yüeh to the Shweli—Robbers and poisonous grass—A high pass—A mountain monastery—The Salween at Mêng-ku ferry—Variety of races—A fine view—The sleeping Buddha Temple—Chinese Buddhism—Arrive at Yung-ch'ang Fu.

It is naturally very much more pleasant to travel about China with companions of one's own race than to make the journey alone, but we felt that by keeping together we should only see a very small part of the country. Our object, besides finding the railway line, was to see as much as we could of the resources and means of communication of the province, and it was only by splitting up and taking different roads that we could make the best use of our time.

Watts-Jones naturally wanted to get on to the proposed railway line as soon as possible, so he started for Yün Chou. Ryder was to go with him as far as Yung-ch'ang and from there probably separate. I decided to go and look at Hsi-lien and Pei-lien, two districts north of T'êng-yüeh which were quite unexplored. Surveyor Lachman Jadu accompanied me.

We all used plane-tables and no objection to our surveying was ever offered by either officials or people. We carried sextants or theodolites to take the latitude by astronomical observations, and we each had a boiling-point thermometer and two aneroids to determine heights. For measuring the distances traversed we each took a solid-tyred bicycle wheel with a cyclometer attached to it and

fitted with a handle to wheel along the road. These wheels we found most accurate and satisfactory, and we all used them throughout our two seasons of surveying. Spare cyclometers had to be carried as they wear out in time.

On the 29th November I left T'êng-yüeh by the west gate and crossing a bare ridge by a low gap between two conspicuous peaks, descended into the fir-woods of the plateau country of Hsi-lien.

We slept at Mu-shui-ho, and found the country people extremely civil, a pleasant contrast to the T'êng-yüeh mob. One old gentleman was particularly communicative and offered to be my guide the next day to the mule and sheep breeding village of Lu-ts'ung-shan. We had a beautiful walk there in the morning over undulating ground through pleasant woods of fir and other trees, the properties of different families being marked off by stone walls. The villages are quite hidden away in trees—peach, walnut, chestnut, plantain, golden bamboo, and the *tsung-pao* palm[1]. If a railway is ever made to T'êng-yüeh this plateau ought to become the hill station of Burma. Situated at 6000 feet above the sea in a beautiful well-watered country, I can imagine no more pleasant contrast with the scorching sun of Mandalay or the hot mugginess of Rangoon.

The simple villagers of Lu-ts'ung-shan I found rather timid at first, frightened either of me or of the Chinese soldier who accompanied me. But a more talkative man soon appeared. The sheep, it seems, are worth about two taels each (five rupees, or 6*s.* 4*d.*), and they use their wool for making rugs. They have tried taking the sheep to sell at Bhamo, but say that it does not pay. They cannot stand the warmer climate and want of grass in the Taping valley, and many of them die on the way. At present the mutton for Burma all comes from India, but with a railway to T'êng-yüeh, the want could no doubt be supplied from Yün-nan. The mule breeding here does not seem to be on a large scale. They get their donkeys from the province of Shen-hsi, and pay as much as 80 or 100 taels for them, a large price in this part of China.

Agricultural pursuits are not the only occupation of the

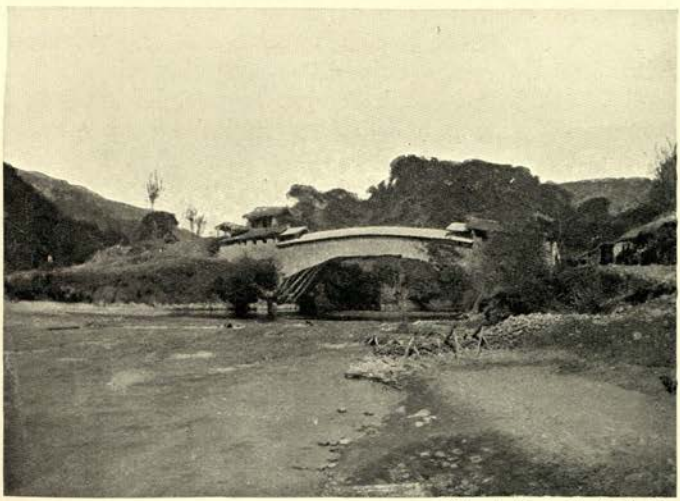
[1] See p. 77.

people of Hsi-lien, for in the afternoon at the village of Wan-yao I found pottery works and a manufactory of iron pans. The potter's wheel was made of one round stone revolving over another. The upper stone has a piece sticking up at the top and round this piece the clay is put. The potter then makes the stones revolve by working a treadle with his foot, and at the same time forms the clay with his hands. In three or four minutes he made a plate and two different sizes of cup. When the moulding is finished the things are put out in the sun to dry. Then comes the glazing. This process I did not see, but it was explained to me as follows:—The glazing stuff is made of rice husk and lime mixed together and heated and then mixed with water. Into this mixture the cups are put and are then baked in a kiln. The result is a greenish coloured glaze.

I then went on, accompanied by several villagers, to the iron works. Here they had a cylindrical-shaped furnace, three feet long and one foot in diameter, in which the iron was placed to melt. An ingenious use had been made of a little stream which flowed past the shed, to turn a horizontally placed water-wheel which worked the bellows for the furnace. Two pan-shaped clay moulds are then taken and one is fastened tightly down over the other, both with the convex side uppermost. The furnace is then tilted up a little so that the melted iron runs into a ladle, by means of which it is poured into a small hole in the upper mould, so that it fills up all the space between the two. It is left for a minute to solidify, and then the topmost mould is taken off and the pan that has been thus formed put on one side to cool.

While I was looking at this, one of the villagers came running up, grinning all over, and shouted out, "Is this a foreign devil?" He was immediately silenced by the others, and one could not take offence where evidently none was meant. The fact is that Chinamen among themselves nearly always allude to us as "Yang kuei-tzŭ," "Sea devil" or "Devil from across the sea," and many ignorant villagers would be puzzled to find any other name by which to call a European. The origin of this expression, I believe, dates from the first Chinese war of 1842. The Chinese

A house in the Hsi-lien district



Photos by Major H. R. Davies

Bridge over the Shweli near Kai-t'ou

generals and admirals looking about for an excuse for their defeat, described our men-of-war as "sea devils," against whom it was impossible for mortal men to contend.

I slept at Shun-chiang, a village of 200 houses, which is perhaps the principal place in Hsi-lien. This district consists of a plain or plateau about 23 miles long running from north to south at an elevation which averages 6000 feet. The northern half runs down the Ku-tung Ho, and is from one to three miles wide. This river then turns off eastward to join the Shweli, and the southern part of Hsi-lien is a plateau with little tributaries of the Ku-tung Ho or of the Shweli, crossing it from west to east. Along these little streams are irrigated fields, so that in going up the plateau from south to north one crosses alternately small rice plains and bits of higher-lying uncultivated ground, covered with rocks and bushes.

The hills all round are fairly well clothed with forest, chiefly of fir trees. The range to the west rises to 9,500 feet, but that to the east is lower, with gaps through it by which the streams reach the Shweli[1]. The abundance of timber is shown by the fact that all the houses are built of wood instead of the usual soft brick. The district is decidedly a prosperous one and contributes to the volume of trade to be got out of T'êng-yüeh. Fruit-growing and sheep-rearing could be carried on very successfully here.

From Shun-chiang we went on by two easy marches to Ma-li-pa, a village in the small district of T'ien-t'ang-kuan which lies at the head of the Ku-tung Ho. Here we found shelter for mules as well as men in a water-tight but very draughty temple. The district is governed by an hereditary Chinese chief, and is of no importance except for its iron mine. This has been worked chiefly by surface-diggings, but in two places there are deeper shafts, the earth being propped up by logs of wood placed close together and supported by posts. One of these goes down forty or fifty feet.

The ore is smelted near the village, and the bellows of the furnace, as at Wan-yao, are worked by a water-wheel. The softer iron is used for the manufacture of pans, but

[1] Some of these streams run into holes in this range.

when hardened by repeated heatings in the furnace it is made into hatchets, hoes, and tripod stands for cooking-pots.

To the north of T'ien-t'ang-kuan is a very interesting country inhabited by the Li-so tribe, which I should much have liked to explore. This race I have found scattered over a very wide extent of country, as far south as the Siamese border, and as far north as the Tibetan parts of Ssŭ-ch'uan and north-western Yün-nan. In the Kachin Hills and the Shan States they are split up into very small and scattered communities, living usually on the very tops of the hills. They originally occupied a good deal of the country to the west and north of T'êng-yüeh, and I have little doubt that the Chinamen of Hsi-lien and many of the neighbouring districts have more Li-so blood in them than Chinese. At present the only district in which the Li-sos form the bulk of the population seems to be the Salween valley from about Lat. 25° 30′ up to Lat. 27° 30′. Their language is closely connected with that of the Lo-los, and they are no doubt a branch of this widely-spread race. I have always found them, like the Lo-los, extremely pleasant and friendly.

Li-so is the Chinese name for this tribe. They call themselves Li-su, and the Kachins know them as Yaw-yen. In T'ien t'ang-kuan they now live on very good terms with their Chinese neighbours, but the remains of a wall round Ma-li-pa and an old two-storied stone tower close by suggest that there was a time when things were not so peaceful. Now-a-days the only enemies of the villagers are wolves, which they say hunt in large packs and will kill even big animals, such as ponies and cattle.

From Ma-li-pa I turned eastward, crossed a range at 8,700 feet by an extremely steep ascent and an equally abrupt descent, rendered more difficult by a drizzling rain. This brought us into the Ming-kuang plain which runs down the Mo-lo Ho in a valley half a mile wide.

We slept at the village of Hsiao-hsin-kai, and I found men smelting lead close by. The lead is found in sand and this sand is first washed in a place prepared for the purpose in a small stream. The heaviest part of it which sinks is then taken away and smelted in the furnace. Both lead and

copper are found in many places in the hills round the Ming-kuang valley, but the miners say it is very uncertain work. They sometimes are lucky and make a lot of money. At other times they do not get enough to pay for the license which they have to get from the Government.

From Ming-kuang, still keeping eastward, we crossed another range by an extremely bad road and reached the Shweli (Lung Chiang) valley. We crossed that river by a type of wooden bridge which is fairly common in Yün-nan. On each bank is a stone pier from which wooden props stick out at an upward angle of about 30°, supported partly by posts from below, and partly by two iron chains from above. A wooden roadway resting on these props stretches out some way across the river from each bank, and the middle part of the bridge is made of five whole trees laid across from the props on one side to the props on the other side.

The river is here some forty yards wide and may be considered as the main branch of the Shweli, though the Mo-lo Ho on which Hsiao-hsin-kai lies is not very much smaller. The Shweli valley in all this part of its course has only a very narrow strip of flat rice fields, but the slope to the hills on the east is very gradual for a breadth of two or three miles, and here there are many villages and a great deal of bean cultivation.

We slept at the large village of Kai-t'ou, the centre of a paper-making district. The paper is of the sort called *pai chih, white paper*, or sometimes *p'i-chih, bark paper*, and is manufactured out of the bark of the *kou* tree, a sort of mulberry, I believe. The bark is first steeped for a day, then boiled with lime, then washed to remove any particles of lime that may adhere to it. It is then pounded with heavy pestles, and the finest pieces are picked out and mixed with water in a large tub to form the pulp. A frame made of very finely split bamboo is then dipped in the water so that a little of the pulp sticks to the top of it. The frame is turned over on to a heap of sheets of paper and the pulp off it when dried becomes the soft white paper, which the Chinese use for writing on.

The next day travelling southwards down the Shweli valley we came to the village of Wa-tien which is the centre

of another paper-making industry of a different kind. This is the *ts'ao chih* or *grass paper* as the Chinese call it, though it is really made of bamboo. The bamboo used is a small variety and only the young branches and shoots can be employed. The process is much the same as that just described except that the whole bamboo branch, not its bark only, is used. The sheets are finally pressed between boards and then dried in the sun. This *ts'ao chih* is a coarse brown paper only used for wrapping things in.

Still keeping down the Shweli we reached Ch'ü-ch'ih where we found yet another sort of manufacture going on. This is the making of a kind of mat which is famous in this part of China for its softness. They are made of a sort of thin reed. The process is carried out by two persons with a framework of strings stretched vertically. One man catches each piece of reed with a cleft stick and pushes it horizontally through all the strings, alternately under and over. As each reed is put in, the other man presses it down with a piece of wood which runs down the strings, so as to get it tight down on the reed below it.

From Ch'ü-ch'ih we went on still in a southerly direction over the range which separates the Shweli from the T'êng-yüeh plain. We had while in T'êng-yüeh noticed a low gap in the N.E. corner of the plain and I was anxious to examine it, as, if a railway was ever made to T'êng-yüeh, this gap would seem to be the best means of extending it further.

I found it fairly practicable, and a line could no doubt be made over it, but I do not think there would be any prospect whatever of a further easterly extension. I look on this part of the range between the Shweli and the Salween as an absolute bar to a railway. There would remain the chance of an extension down the Shweli valley to Nam-kham, but it would be by no means all plain sailing, as the numerous small tributaries of this river, with steep little spurs between them, not to mention occasional gorges, would entail much work in bridging and levelling.

From the T'êng-yüeh plain we turned back northwards and crossing to the left bank of the Shweli returned to Kai-t'ou by a slightly different road from that by which we had come. On our way down I had been obliged to leave

my Chinese servant behind here as he was suffering from bronchitis and fever, brought on, I believe, by the rainy, misty weather which is most unusual at this season of the year. I found him quite recovered.

I now turned towards Yung-ch'ang Fu, but determined to keep in unexplored country by taking a route some way to the north of the T'êng-yüeh Yung-ch'ang main road. The mountain range which separates the Shweli from the Salween valley is here a very high one, nearly precipitous at the top so that there are only a few paths across it. I decided to take one known as the Ma-mien-kuan pass. This being rather an out-of-the-way road, I had all the usual stories told me to try and dissuade me from going that way. The tales this time took the form of accounts of the deeds of Li-so robbers and a description of a sort of poisonous shrub which would kill the mules if they ate it. This last has, I believe, some foundation, as the shrub was pointed out to me on the pass, but I cannot imagine that animals would eat it if there was any grass to be got. The pass has evidently a bad name as I had great difficulty in getting a guide. Only one man would come, and I had to pay him at the exorbitant rate of 10½*d.* a day.

It was not till the second day out of Kai-t'ou that we tackled the pass. From Shan-yao where we had slept, there is a pretty stiff climb to begin with, and then some down hill before the really bad part comes. In the last two miles there is an ascent of 2,500 feet to the top of the range, which I made about 10,500 feet above sea level.

Just before reaching the summit is a Buddhist monastery, where four or five Chinese monks live who give food gratis to travellers and look out for people who miss the road in the snow, which often falls heavily in January. They have a very substantial house, the lower story built of stone and the upper of wood. As a special favour I was taken into the inner court by the head monk, who said he did not usually let people inside. The door from one court to the other in the lower story is barred up by great beams, and to get in we had to climb a ladder, go round the upper storey, and get down again inside. This, they say, is a precaution against Li-so robbers. The monastery was extra-

ordinarily dirty and so were the monks, but they certainly impressed me with their sincerity much more than the ordinary temple priest, who is often a great blackguard, and is usually held in no respect by his fellow-countrymen.

The descent on the eastern side of the pass was as bad as the ascent had been, and we had to go down 6000 feet to the village of Ssŭ-ling-kang before we could find any shelter or forage. We got in just after dark, our mules dead beat, having taken ten hours to do the march of fourteen miles.

The next day, the 16th December, we crossed the Salween at Mêng-ku ferry at an elevation of 2,550 feet, a drop of 8000 feet from the range we had crossed the day before. The river is here 100 yards wide, running with a current which precludes all idea of navigation. In some places the hills close right in on both sides, in other places there is half a mile or a mile width of rice cultivation. The valley has the warmer climate and denser vegetation of the Shan States—quite different from all the neighbouring plains of Yün-nan. It is a mild enough climate to grow chillies, and it also produces persimmons which are sold dried like figs.

The population of this part of the country is small but varied. On the hills are Lo-los, Li-sos, and Chinese, while in the valley are Shans, and also Chinamen who most of them come from the neighbouring province of Ssŭ-ch'uan, the Yünnanese finding the place too hot and feverish. I do not think that the Shans extend up the Salween valley very much higher than this, for from all accounts one soon gets into a country ruled by semi-independent Li-so chiefs.

Four more marches through a very hilly country brought us to the top of the range which divides the Salween from its tributary, the Yung-ch'ang river. The road crosses it at 8,400 feet, and from the top is a fine view of range after range of beautiful mountains, the snow-capped Ts'ang Shan, which overlooks Ta-li Fu, being clearly visible. We descended into the Yung-ch'ang plain and slept in a remarkable temple called the Shui-fu-ssŭ or Sleeping Buddha Temple. It is picturesquely placed at the foot of a jungle-covered spur with a piece of water in front of it. The inner shrine is a large natural cave, in which is the image

of a sleeping figure from which the temple takes its name.

The walls were covered with inscriptions written up by different pilgrims, and I was surprised to find that many of them were written in Shan and even in Burmese. I imagine that this must be an old temple dating from the time when Yung-ch'ang[1] was inhabited by Shans. As a rule Burmans and Shans have very little respect for a Chinese temple. The degraded form of Buddhism practised by the Chinese does not appear to them anything like their own religion. They always speak of the Chinese as spirit-worshippers and do not consider them as fellow-Buddhists.

On the 21st December a few miles of level road brought us to Yung-ch'ang Fu, where we put up in an excellent inn.

[1] Wan-hsang is the Shan name for Yung-ch'ang. Probably the Chinese name is a corruption of this.

CHAPTER XVII

YUNG-CH'ANG-FU TO TAW-NIO AND KUN-LONG.

Through fir woods to Niu-wang—The Shih-tien plain—Yao-kuan—A temple of hideous images—Hilly going to Mêng-po-lo—Cotton grown—Mêng-p'êng—The Miao tribe—A crop of oranges—The British frontier post at Taw-nio—Meeting with Captain Johnson—No news of Turner and Ker—The Taw-nio district—The fort—Sport at Taw-nio—Theft by my servant—Kun-long—Tracking elephants—Arrival of Turner, Ker, and Scott.

LEAVING Yung-ch'ang by the south gate, we made two short marches through undulating country covered with fir woods to the large village of Niu-wang, where I found the inhabitants particularly inquisitive.

The next day our road lay through the very fertile plain of Shih-tien. This, like Yung-ch'ang and many other places in this part of Yün-nan, produces two crops in the year. The rice is harvested about October, and then the winter crops of opium, beans, peas, or wheat are put in. The Shih-tien plain also grows excellent tobacco and sugar-cane. We slept in a fine temple with a nice flower garden, and the walls ornamented with realistic pictures of the punishments in the Buddhist hell. The Hsün-chien, the small official here, was very friendly, and the people consequently as civil as they had been the reverse at Niu-wang.

From the Shih-tien plain an ascent of 1000 feet brought us on to a plateau country, with little hills covered with fir trees rising out of it 200 or 300 feet above the general level. In the hollows between these run little streams, along which are narrow strips of rice cultivation and a few scattered villages. At night we reached Yao-kuan, a large village, whose inhabitants allow their sense of curiosity to get the better of any small stock of manners that they may ever have possessed. We slept here in a temple which possesses the finest collection of hideous images that I have ever come across.

We had two more days of hilly walking, with occasional glimpses of the Wan-tien plain below us to the east, and then turning in a westerly direction we went down 3000 feet to the little plain which the Chinese call Mêng-po-lo and the Shans Möng Maw. Here I pitched my tent in the courtyard of the Shan monastery which stands on the bank of the Yung-ch'ang river among magnificent trees.

This place lies at an elevation of 2,300 feet, and is not far above the river's junction with the Salween. The inhabitants are all Shans, and the plain very small and poor. It is only remarkable as being one of the few places in Yün-nan low enough to grow cotton. The crop is dependent on a good rainy season, and the amount produced is quite insignificant.

On the 27th December we forded the Yung-ch'ang river and had the usual stiff climb out of the valley. We travelled for three days over a very hilly country to Mêng-p'êng[1], a little plain containing three or four Chinese and one La village. There was also a recently constructed fort here with a small garrison of Chinese soldiers.

The country we had passed through between Mêng-po-lo and Mêng-p'êng is chiefly inhabited by Chinese and Lo-los, but we met on the road one day some people whose women I recognised by their white pleated kilts as belonging to the Miao tribe whom I had previously seen in the Southern Shan States. They told us there were only a few villages of their race in this neighbourhood, and that they had emigrated from Kuei-chou province thirty or forty years ago.

This tribe I have come across in many places scattered about Western China and the Shan States, though nowhere in very large communities. I have seen them as far north as the Tibetan State of Mi-li and as far south as Keng Tung, one of the Southern Shan States. Westward I have not heard of them beyond the neighbourhood of Taw-nio. All these people, I believe, originally come from the southern part of Kuei-chou province, where they still inhabit a large tract of country, ruled by semi-independent chiefs of their own race. Miao or Miao-tzŭ is the name the Chinese have

[1] Möng Hpawng in Shan.

given them, but they call themselves Mhong. I have always found them very pleasant and friendly.

From Mêng-p'êng it took us two days of fairly easy going through a country peopled chiefly by Shans and Las to reach Na-hsang, a Shan village just on the Chinese side of the frontier. The village was full of orange trees, which were at this season covered with fruit—one of the prettiest crops conceivable.

The next day we crossed the boundary and reached Taw-nio, the British frontier fort, where I found Captain G. W. Johnson in command of the garrison of military police. Only those who have travelled alone in strange countries can fully understand what a pleasure it is to meet one of one's own race and talk English again. And indeed Captain Johnson himself had been leading as solitary a life as I had, for he was the only European in Taw-nio, and was dependent for his society on the rare visits paid by civilians or police officers from Lashio, the headquarters of the Northern Shan States, which lies 120 miles off to the west.

I fully expected to hear news here of Turner and Ker, but there was none forthcoming. It was of great importance that I should see them so as to arrange their future movements, so there was nothing for it but to wait till they came. I considered myself extremely fortunate in being able to make this enforced halt in a British fort and with such a pleasant host as Captain Johnson.

Taw-nio, or Ma-li-pa as the Chinese call it, is a frontier district which, though ruled by a Chinese chief, would have the strongest objection to being handed over to the Chinese empire. It forms part of the Shan State of Hsẽn-wi[1], and no doubt its inhabitants find that they have much more independence in their present position than they could hope for under Chinese officials, especially now that the mandarins have begun to interfere more and more in the affairs of the border States and to establish garrisons close to the British frontier.

The main part of Taw-nio consists of a grass plateau pleasantly dotted with patches of jungle. Villages are few

[1] Called Theinni by the Burmese, and Mu-pang by the Chinese.

Photo by Major G. W. Johnson

Taw-nio Fort

Photo by Major H. R. Davies

Ch'üan-kang ferry

and small, but the population of the plateau and the surrounding hills is very varied, comprising Shans, Las, Chinese, Palaungs, Lo-los, Miao-tzŭ, and a few Kachins. The elevation is about 3,500 feet, and the climate, though not so cold as the more northern parts of Yün-nan, is pleasant enough. The population would doubtless be much greater if the country were not so dry, for much of the plateau is short of water and rice is consequently very little cultivated.

The whole plateau is some 12 miles long by four miles wide, and one of its most interesting features is that the streams which run across it find their way right through a range of limestone mountains, reappearing on the other side to fall into the Nam Ting.

The fort was of the usual type of the frontier posts of Burma. Lines of long-shaped huts for the sepoys, made of wood, with split bamboo flooring, and thatched with grass, the whole surrounded by a bullet-proof stockade.

The garrison was 75 men, a smaller number than would have been necessary among the Kachin population of the Bhamo frontier. For here in the Shan States there has never been much fighting. The Shans have a distinct aversion to any form of war, and it is only in the Wa country that there have been any hostilities to speak of. The Was have a rooted objection to strangers and have more than once given our small columns some trouble, but they do not appear to carry out their raids at any distance from their own hills.

For a time it was quite pleasant to have a rest and spend the day in shooting and reading newspapers. One could always go out in the afternoon and be pretty certain of getting something, and the game was quite varied. The Chinese francolin, the bamboo partridge, the grey quail, the Japanese quail, the jungle fowl, the pea-fowl, and in places a few teal and snipe were all to be found in the neighbourhood, and on one or two occasions we organised beats of the patches of jungle and killed a barking deer and saw sambur.

The truth of the old saying, "Idleness is the root of all evil," is nowhere more apparent than when the traveller is unfortunately compelled to make a long halt. The proverb

was here exemplified by the conduct of my Chinese servant. He had served me well for two years in Burma and in India, and had been most useful in China, but the halt was too much for him. He took to drink, opium, and gambling, and was finally caught in the act of stealing my interpreter's property. I had no alternative but to get rid of him, and I imagined that being discharged in such an out-of-the-way place would be particularly inconvenient to him. Soon afterwards my pony and my cook's pony disappeared. The thief was never caught, but I have little doubt that my servant, Ma-chin-kuan, was the culprit. Annoying though the loss was, I could not help feeling some admiration for his daring method of extricating himself from his difficulties. A Chinaman is at his best when facing misfortune.

Soon after reaching Taw-nio I made a trip down to Kun-long with Captain Johnson. The distance is 28 miles, and we took two days to do it, ending with a very steep drop into the Salween valley. Kun-long had not changed in any way since my last visit. It still remains the same little Shan village buried in the jungle, with three shaky dug-outs on which to cross the river.

There is always a herd of elephants in this neighbourhood, and I spent three days after them, but with no success. The first day we did get on to the fairly fresh tracks of a tusker, but followed him a long way without getting any closer. On the other two days we did not find anything fresh enough to follow, though old tracks were abundant.

Pleasant though this life was for a time, I could not help feeling that I was wasting much valuable time in the best season of the year for travelling. Mr Turner and Mr Ker, who had been delayed from various causes, at length arrived, accompanied by Mr H. L. Scott, who had also been sent out by the Yün-nan Company to investigate commercial prospects. By the end of January we were ready to strike out into China again.

CHAPTER XVIII

KUN-LONG TO YÜN CHOU *VIÂ* CHÊN-K'ANG.

Leave Taw-nio—A deserted village—A picturesque ferry—An up and down march—Stopped by armed men from Mêng-hung—Impervious to argument—Our final triumph—Chên-k'ang—A woman regent—A disorderly State—Snow-capped mountains—New Year's Day—Exorbitant wages—Variety of races—Shooting in Yün-nan—Nameless rivers—Yün Chou—A friendly mandarin—Sugar-making—The roads from Kun-long to Yün Chou.

ON the 30th January I started off again with Mr Ker as my companion. We were making for Ta-li Fu, where we expected to hear news of Ryder and Watts-Jones, who had in December come down towards Kun-long, but had turned back northwards.

I had already been in 1895 along one road from Ta-li to Kun-long, so naturally took a different route this time in order to travel through unexplored country. The road we made up our minds to follow passes through Chên-k'ang (Möng Cheng) to Yün Chou, and from there, avoiding Shun-ning, goes more directly northward through Mêng-hua T'ing to Ta-li.

Our first march only took us back to Na-hsang, the place I had passed through on my way into Taw-nio. This village, which appeared quite prosperous a month before, we found almost entirely deserted. On enquiry we learned that some Chinese soldiers were expected there soon as escort to the boundary commission. No doubt these worthy villagers had had previous experience of Chinese troops and were determined to hide themselves and their property as much as possible.

From Na-hsang we turned off in an easterly direction and reached the Nam Hpawng at the village of Ch'üan-kang, which is inhabited by Buddhist Las. The little river

here runs between jungle-clad banks, and the scene at the ferry is most picturesque. A rope made of strong creepers is stretched across the stream and a small raft is fastened to this by a large ring, so that the ferrymen standing on the raft pull themselves along by hauling at the rope.

The crossing was not made without a little difficulty, for the ferrymen refused to move till they were paid in advance at an exorbitant rate. I applied the usual remedy of a tap or two on the back with my stick, and we got across without any further trouble except the unavoidable slowness of the process owing to the small size of the raft. From the ferry we had an ascent of 3000 feet in the first three miles, and some more hilly going after this to the Chinese village of T'ou-tao-shui.

The next day we experienced what was quite an extraordinarily up and down march even for Yün-nan. We first crossed a range which forms the boundary between the Chinese Shan States of Kêng-ma and Chên-k'ang, and after that we had three more distinct descents and ascents. We slept in a temple at Ts'ai-chia-chai, and could not help noticing the particularly obsequious manner of the head-man of the village, though we subsequently found that he had sent on messengers to Mêng-hung on purpose to get us stopped.

It may be remembered that Mêng-hung (Möng Hom) is the place which I had some difficulty in getting through in a former journey in 1895[1], so knowing the bad reputation of the people of this place, we rather expected to have some trouble. Our anticipations were not falsified, for after going a few miles we were met by fifteen or twenty men armed with guns, spears, and swords. Their leader, a villainous-looking Chinaman in a large bamboo hat, advanced and said he had orders from the head-man not to allow us to go by that road. We neither of us had our passports in our pockets, but we at once offered to undo our baggage and get them out. He said he did not care the least whether we had passports or whether we had not, that we might go round by Mien-ning or any other way we liked, but could not pass through Mêng-hung.

[1] See p. 108.

I spent some time in arguing, asking whether the Mêng-hung *t'ou-jên*[1] or the Emperor of China, who had given us our passports, was the bigger man. Arguments and threats were alike useless. The man was not really uncivil, but was particularly obstinate and impervious to argument. He kept repeating "I have my orders and cannot depart from them."

"Will you shoot us if we go on?" I asked.

"No, I will not shoot you. I will simply make my men stop you."

I had some of the mules driven on to see how much in earnest he was, but they were immediately seized and stopped.

Finally we agreed to go back and camp at the village of A-a-shan, which was half a mile behind us. Arrived there, we had the passports read out, and our interpreters and the Mêng-hung men began a lengthy discussion which lasted into the evening. Our obstinate friend at length agreed to send a letter to the head-man telling him about the passports and asking for fresh orders.

A lot more men, Las and Chinamen, turned up in the course of the day, and I believe they had the greater part of the armed strength of Mêng-hung waiting for us a little further on in case we had attempted to force a way through. As Ker and I with our shot guns were the only armed men in the party, I need hardly say we had no intention of trying anything of this sort. Even apart from the hopelessness of forcing a way through a hostile country, I do not think a passport quite entitles one to do this, and I have always determined both in China and Tibet to use arms only as a last resort if actually attacked.

Some of these ruffians hung about our tents all day and even stayed on after dark, till we told them to be off, adding that we had loaded guns ready at night for the reception of thieves. They did not seem to appreciate this remark, but after a little hesitation they went, and we saw them no more. It is best to carry things with a high hand in China when one knows one is in the right.

The next morning some more men arrived, sent up by

[1] Head-man of a village.

the head-man. They read our passports but did not appear particularly impressed with them, and said definitely that we could not pass through their territory. I told them we should go straight away to Mêng-p'êng, the nearest Chinese post, report to the officer there that the Emperor's passport had been disregarded, and come back with Chinese soldiers to punish them. They went outside and had another consultation and soon came back and said they had decided to let us go on. The threat of Chinese soldiers had won the day. Perhaps the Mêng-hung people had had experience of their ways.

We were very soon ready, much relieved to have got out of our difficulties. A downhill road took us past the town of Mêng-hung in about five miles. They were very anxious that we should not actually enter the town, and we did not press the point as I had already been there four years before and had found nothing so enchanting in it as to make me wish to visit it again.

Here to our great delight our friends left us, but we had not seen the last of them, for in the evening when we were settling down in a temple in the village of Man-kang, we were disgusted to see them turn up again. However it turned out that they had quite changed their tune. They appeared for some reason or other to be now frightened at what they had done, and were very apologetic.

On arriving at Ta-li Fu at the end of the month I reported the whole matter to the *tao-t'ai*[1]. He sent back an answer to say that Liu, the Mêng-hung head-man, was already wanted by the Chinese authorities for the murder of his brother and other crimes, and that now with this fresh charge against him he would certainly have him arrested. I do not know whether the *tao-t'ai* ever acted up to his word. I should be very much surprised if he did so.

The next day, the 5th February, a fairly level road brought us to Chên-k'ang, or Möng Cheng as the Shans call it. This is the capital of a large Shan State which comprises the unruly district of Mêng-hung within its borders. The old sawbwa was murdered some years before,

[1] The chief civil official of Ta-li.

and his son at the time of our visit being only 12 years old, his mother, according to Shan custom, ruled the country for him. The State comprises a great many Las, and many of the Chinamen are a decidedly rough lot, so that the old chieftainness finds her kingdom rather more than she can manage. It has an unenviable notoriety as a badly governed country where murders and rebellions are not uncommon, and it is compared very unfavourably with the neighbouring state of Kêng-ma.

The town, which contains some 300 houses, is built in a small and poor plain at an elevation of 2,950 feet. It is chiefly inhabited by Shans with a few Chinese, and the plain contains altogether about a dozen Shan villages. There is very little trade in the place. An occasional mule caravan from Ta-li or Yün Chou comes here to sell tea, iron pans, and other miscellaneous products of China, taking away with them opium which is grown by the Chinese villages on the surrounding hills, and seems to be the only export.

The sawbwa's Chinese secretary came to see us in the evening and was very apologetic about the behaviour of the Mêng-hung people. He described them as ignorant Las who would not listen to reason. I have no doubt the Chên-k'ang government stand in considerable dread of their lawless subjects.

The next day we marched across some low spurs into Mêng-ti (Möng Ti in Shan)[1], another small Shan plain. One of the numerous people who came to see us (or, to be more accurate, to stare at us) had lived several years in Rangoon and could talk Burmese quite well.

On this march we had a very high snow-capped range of hills on our right, dividing the Salween basin, which we were in, from the valley of the Nam Ting. This is the same range I had seen from Mêng-sa in 1895, and we were now able to determine its height as about 11,500 feet, an elevation which, though not uncommon in the north of Yün-nan, towers far above any of the other ranges at this latitude.

[1] This place must not be confused with the larger place of the same name which is called Nan-tien by the Chinese and lies on the T'êng-yüeh-Bhamo road.

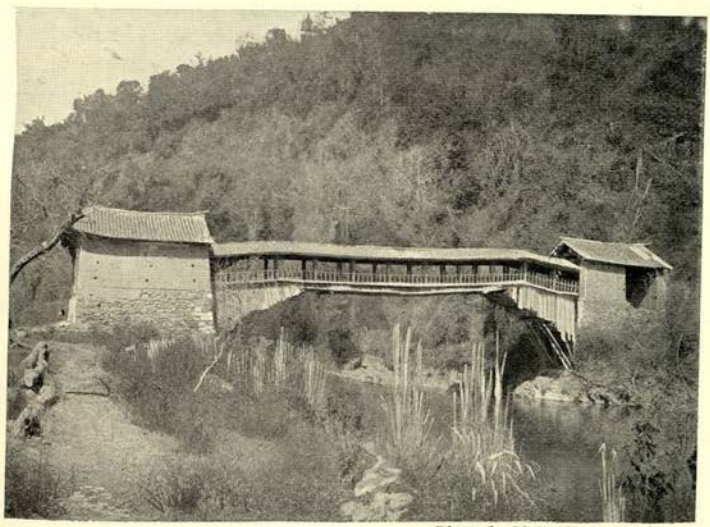
Leaving Möng Ti, we took two marches over a hilly and in places forest-clad country to arrive at Hsi-la, a village in a narrow paddy plain, whence a road to Shunning branches off from our route. This, like most of the neighbouring villages, is inhabited by Chinese, but we also saw some of the Miao tribe near here, and they told us there were a good many of their race living in the high range to the east.

We were now well out of the barren dried-up hills which are characteristic of the Chên-k'ang State, and our march from Hsi-la lay through pleasant woods of fir and other trees, alternating with well-cultivated hillsides. After ascending some way, a narrow gorge with precipitous hills on either side brought us to the top of the Salween-Mekong watershed, at a height of 6,600 feet. With a few more miles of steep up and down over rough rocky ground we reached Ta-li-ssŭ, a little village in a steep-sided valley, where we found shelter in a temple. One discovery we made on this march was two trees growing among the fir forests which Ker recognised as cork trees. They were both young trees, 20 feet high or so, and we could not find any more, though it is true we had not time for a very thorough search.

The next day, the 10th February, was the Chinese New Year, a day on which no Chinaman will travel if he can help it. Our own followers having no friends in this out-of-the-way spot were quite willing to march on, but the difficulty was to get a guide. After much conversation we managed to engage a lad at the exorbitant rate of sevenpence for the day's work. He was not very willing to come, but his father, probably with an eye to handling some of his son's wages, said, "What's the use of your talking about keeping the New Year when you have got no money to keep it with?" and so the bargain was clinched.

We continued our journey through a fine hilly country, fording the Ya-lang Ho, a beautiful stream flowing through wooded banks. The population of these parts is very varied. The P'u-mans are the most numerous, and there are also Chinese, Lo-lo, and Miao villages. These P'u-mans, like other communities of this tribe that I have met, have forgotten their own language, and in this instance

The Ya-lang Ho



Photos by Major H. R. Davies

Bridge over the Nan-ch'iao Ho

they have taken to talking Chinese among themselves. We met a party of them out with cross-bows and dogs to hunt sambur, which they say are fairly plentiful in the valley of the Ya-lang Ho.

We wished we had had time to halt a day or two and shoot, but we had come out to get through as much work as possible, and we had to go on. Yün-nan is certainly not a great shooting country, but its sporting capacity must not be judged by the small amount of shooting we were able to do. With leisure to halt whenever he wanted to, the traveller might certainly get some fair shooting in places.

Panthers, wild pig, wolves, sambur, and barking deer undoubtedly exist, and in Ssŭ-ch'uan I once saw a tiger[1]. Of small game the Lady Amherst pheasant and Stone's pheasant are fairly common, and in some of the lower-lying places there are Chinese francolin and Bamboo partridges. Hares I have seen, but I do not think they are at all common. Snipe I have shot occasionally, but have never seen very many of them. No doubt the duck shooting is the best form of sport to be got in Yün-nan. This is very good in the Ta-li lake and the country to the north of it and in several other places. It is probably worth nobody's while to come to Yün-nan on purpose to shoot, but the future traveller may, if he has leisure, manage to find some amusement and vary his diet.

The next day, after a steep descent of 2000 feet, we crossed the river which lower down at Yün Chou is called the Nan-ch'iao Ho. Like most Chinese streams it only retains its name for a short part of its course, and, where we crossed it, does not seem to have any particular name.

Curiously enough, though rivers are often nameless, bridges nearly always have names and these are generally written up on the bridge, sometimes also with a list of the persons who subscribed to build it and the amounts they gave. Rivers are generally called after the nearest bridge or the nearest important village, thus constantly changing their names.

The stream is here 40 yards wide with a depth of four or five feet, flowing swiftly over a rocky bed. The

[1] See p. 216.

bridge, of which a photograph will be found, is a wooden one supported on beams stuck out slant-wise from stone piers. The road does not, as might have been expected, follow the river down to Yün Chou, but makes a short cut across a high range. We climbed part of the way up it and camped at Pa-pao-shan among fir woods.

On the 12th February we had a pretty stiff climb to the top of the range at 8,200 feet. There is a good deal of jungle as one gets higher, full of rhododendrons which were just out in flower. From the top a descent of 4000 feet and some flat going at the bottom took us into Yün Chou.

The mandarin here was particularly civil. We went to call on him the day after our arrival, and Ker took a photograph of him and his whole family. Even his wife appeared and formed one of the group, so the official is evidently a man without prejudices. His son, a youth of 16, bursting with curiosity and a thirst for knowledge, spent nearly his whole time in our room in the inn, minutely examining all our belongings and asking questions on every conceivable subject. No doubt he meant to make himself extremely agreeable, but as we had a lot of work to do we found him a bit of a bore.

The mandarin's civility was not, however, confined to pleasant words, for Ker's interpreter, happening to have his watch stolen, the thief was caught in a very short time, the watch recovered, and the culprit put in the stocks. The people of Yün Chou we also found very civil, and we could walk about the streets without attracting much attention. There are a great many Mahommedans here, and the Chinese Mahommedan I have generally found very friendly.

The place did not seem to have changed at all since my previous visit in 1895. Sugar cane is the most important thing grown, and the cutting and pressing of this crop were in full swing at the time of our visit. The presses consist of large wooden rollers, worked usually by a buffalo walking round and round after the manner of chaff-cutting machines in England. They manufacture brown sugar of the sort called *jaggery* or *goor* in India. They do not know how to refine it.

Photo by Captain W. A. Watts-Jones

Yün Chou from the east

Photo by Mr J. S. Ker

The Yün Chou mandarin and his family

The road we had just come up from Kun-long to Yün Chou does not compare at all favourably with that I had followed down to Kun-long in 1895. It is in fact not used as a through trade route at all, and the whole way from Taw-nio to Yün Chou we did not meet a single loaded animal.

CHAPTER XIX

YÜN CHOU TO TA-LI FU.

Watts-Jones's line across the Mekong—Theatricals at Mêng-lang—Wild pig and pheasants—The Mekong at Hsi-chang ferry—Narrow paths—Falls of our mules—A Chinaman's pipe—P'u-mans—Exploring a pass—Panthay villages—An Arabic koran—A midnight thief—The Kung-lang valley—Hot springs—Mêng-hua T'ing—An anti-foreign town—Iron mine—Ta-li Fu—Mr Amundsen's travels—No news of Ryder or Watts-Jones.

At Yün Chou we had found a letter left there by Watts-Jones. He had discovered a practicable way across the Mekong *viâ* Mêng-lang and Kung-lang, but there were some passes to the east of the latter place which he had not had time to explore. It was possible that these might prove easier than the line he had found, so we determined to examine them on our way to Ta-li.

After two days' halt at Yün Chou we set out again, and had a fairly easy march to the village of Mêng-lang. Here New Year festivities were still going on, and we were invited to a theatrical performance in the village temple. The young men of the village had got themselves up as elephants, lions, stags, storks, and other animals. The disguise was most crude, and the performance consisted of dancing uninteresting dances and turning somersaults very badly. However the villagers were quite pleased, and we expressed our delight and surprise at the histrionic talent of the place and rewarded the performers with some lumps of silver. I should mention that in places where there is no regular theatre, temples are the recognised places for theatrical performances.

Leaving this village the next day we passed some sulphur springs with regular covered-in bathing tanks. These hot springs are very common in Yün-nan and are much resorted to by rheumatic people. Quitting the main

Photo by Mr J. S. Ker

Bridge at Mêng-lang

Photo by Major H. R. Davies

Hsi-ch'ang ferry over the Mekong

road to Ta-li Fu we climbed up to 8,300 feet, where on top of the range is a nice open country covered with fern and patches of tree jungle, an ideal place to find pheasants in if we had had time to go after them. There is no doubt game in this country, for while descending the forest-clad slopes on the other side, first a wild pig crossed the road, and soon afterwards two silver pheasants. We failed to get a shot at either.

On the 17th February we reached the Mekong at Hsi-ch'ang ferry. The river is here 100 yards wide, with a strong current running over a rocky and sandy bed which it fills. Its height is 3,250 feet, and though there is no flat ground, the river is rather less shut in by steep hills than in most places—a lucky circumstance as it is in this part of its course that the railway must run along it for some distance.

We were taken over by two large boats, each capable of holding eight mules. It is considered dangerous to swim animals across here, as the river is full of eddies and undercurrents. After crossing we climbed 2000 feet to the village of A-lo-kai. We were now in a very rough country, and our road up the Mekong valley the next day was so narrow that two of our mules had bad falls down the hill-side. A nervous mule when he sees a narrow place will often try to rush past it, and if his load catches a bit of projecting rock he is naturally thrown right off the road. It is wonderful how seldom they are hurt. I have seen a mule roll down a hillside for 200 yards or more and begin quietly grazing when he gets to the bottom. Probably their loads save them a good deal.

In this case the only damage done was the thorough soaking in a small stream of the whole of the effects of Ker's interpreter, much to that individual's indignation and to the amusement of the rest of our Chinamen. His damaged belongings included a lot of cigars which he had brought from Mandalay and which naturally could not be replaced in Yün-nan.

The Chinaman in his natural state smokes nothing but a pipe, which always has a stem of enormous length and a bowl which only holds enough tobacco for a few whiffs. He is therefore continually employed in relighting his pipe,

and for this purpose keeps in his house a taper constantly smouldering. To blow this taper into a flame is quite an art. It requires a short quick puff, stopping very suddenly, and the European unused to such a thing finds considerable difficulty in managing it.

We camped at Hsiao-ch'in, which lies near the mouth of the side valley which we wished to explore. Here at last I found P'u-mans who knew their own language, and I took down a vocabulary from them[1]. It resembles the La and Wa languages, and I have little doubt that they are connected with these tribes, especially as they here call themselves Wa-la. P'u-man is only a name given to them by Shans and Chinamen.

Leaving our camp standing at Hsiao-ch'in, we started the next morning to explore the side valley which runs down from the high range to the east. In a few miles the view of the steep hills at the top of the range convinced us that this was no good for a railway, and that the route Watts-Jones had surveyed up the Kung-lang valley was the only likely way to get up out of the Mekong.

Our day was not, however, without interest, as we discovered that there are a good many Panthay villages in this out-of-the-way spot. On our way back we went in and had tea with the head-man of one of these. He told us that they had lived here for 16 or 17 generations, so if that is true they may be the descendants of some of Kublai Khan's soldiers. I asked them if they had korans in Arabic, and they at once produced one. The head-man said he could read it, but did not seem very anxious to give us a specimen of his Arabic scholarship. We thought it more polite not to press him, as he would have found it rather difficult to "save his face," if it turned out that he could not read a word.

We slept at Hsiao-ch'in again, and in the middle of the night were waked up by loud yells. It appears that one of the mule men had heard someone moving about on the hillside, and that when he shouted to know who it was, the man ran away. No doubt he was looking about to see what he could pick up, but he had not succeeded, as

[1] See vocabularies in pocket of cover.

nothing was missing. Neither Ker nor I had been very favourably impressed with the appearance of our Panthay hosts of the afternoon, and we had a shrewd suspicion that some of them had paid us this midnight visit, though certainly there was nothing to prove it.

On the 20th we descended very steeply to the Mekong, but left the river again immediately by an equally abrupt ascent on to another spur, whence we again went down into the valley of the small Kung-lang river, which is followed up with a good deal of up and down to the village of that name. Here the valley widens out into a quarter of a mile width of paddy fields. The place contains about 80 houses and is the residence of a small official, a *hsün-chien*. The population of the village is Chinese, but the surrounding country is inhabited by P'u-mans and Lo-los, the former near the river, and the latter on the higher hills. Our road on this march had been even narrower than usual, with rocks jutting out in places. No less than seven of our mules fell down the hillside, but no greater damage was done than the smashing of a bottle of brandy.

We were now again on the high road from Yün Chou to Ta-li, which we had left at Mêng-lang. Three more days of the usual hilly marching took us to Mêng-hua T'ing. The top of the range to the south of this place is 8,500 feet, where our route crossed it, and from here we had a fine view of the town and plain beneath us, and of the snowy mountains of Ta-li beyond. Descending into the plain we passed some hot springs, with a large bathing tank. Where the water runs out of this, all the stones and earth are covered with a white salt-tasting deposit of which the water is evidently full.

Before entering the town we crossed a shallow sandy stream by a three-arched brick bridge. This is the head waters of the Red River of Tong-king. Mêng-hua contains about 1000 houses and is surrounded by a good stone wall. It has always been, for some reason or other, rather an anti-foreign place, and inn-keepers were not at all anxious to receive us. However we forced our way in, and the good man of the house thought it best to acquiesce in a *fait accompli*.

The plain like many others grows two crops; beans

and opium are produced in some quantity. European goods, such as cotton, cloth and thread, come by Bhamo, T'êng-yüeh, and Ta-li. There is not much trade in the place, though we did on the march in meet some mules loaded with iron. This, they say, is produced in the Shuang-lung-tung mine, two days march off, in the direction of Yang-pi.

Continuing our journey on the following day up the Mêng-hua plain we struck into the road I had come down by in 1895[1], and followed this to Ta-li Fu, which we reached on the 26th of February. Here we were glad to find Mr and Mrs Graham of the China Inland Mission, and also Mr Amundsen, a Swedish missionary. The latter had just arrived from Ta-chien-lu[2], after a most interesting journey in which he had visited a great deal of previously unexplored country in Chinese Tibet. He has since given an account of his travels to the Royal Geographical Society[3].

Ryder and Watts-Jones had both passed through Ta-li some time before, and we expected that they would have left a letter for us. They had in fact done so, as we afterwards found out, but their Chinese servant had neglected to give it to Mr Graham, and we were consequently without certain news of them. All we could learn was that they had both gone north to Li-chiang Fu, and from there had separated, taking different routes for Ch'u-hsiung Fu (lat. 25°, long. 101° 35′). We therefore decided to take the main road to the latter place, as none of us had yet been along this route, though several former travellers had seen it.

[1] See p. 72.
[2] Lat. 30° 5′, long. 102° 10′.
[3] *Geographical Journal*, June 1900, and November 1900.

CHAPTER XX

TA-LI FU TO YÜN-NAN FU.

Chao Chou—The Ming-chia tribe—Hung-ai—The capital of an ancient kingdom—Yün-nan Hsien—"Two foreign officials, one black and one white"—Meeting with Watts-Jones—His line for a railway—A region of lakes and ponds—Wild geese and duck—A bare dry sandstone country—Meeting with Ryder—Chên-an Chou—A poor town—Ch'u-hsiung Fu—A conservative population—Six Englishmen meet—Ker goes northward to the Yangtze—Woman falls into a well—Belief in medical knowledge of Europeans—Kuang-t'ung Hsien—A broken-down city wall—One name for natives of Europe and India—The Ta-li *tao-t'ai's* jurisdiction—Lu-fêng Hsien—An-ning Chou—Yün-nan Fu—Wretched inn—Europeans in Yün-nan Fu—The city and lake—The Arsenal—Two-man rifles—The climate of Yün-nan Fu.

AFTER two days' halt at Ta-li, Ker and I started again on the 1st of March and, passing through Hsia-kuan, reached Chao Chou, a town of 600 houses near the S.E. corner of the big lake. It is a poor-looking place compared with Ta-li or Hsia-kuan, but it seems to be growing, as they had lately enclosed some additional space within its walls. The inhabitants, like those of the Ta-li plain, are chiefly of the Ming-chia tribe, though there are many Chinamen among them, especially in the town.

The next day a very gradual ascent brought us to the top of a low range, from which we descended somewhat steeply by a dangerously slippery paved road to a fine well-cultivated plain in which splendid crops of opium are grown. There is no official city here, and the principal place in the plain is the large market village of Hung-ai. We had now left the Min-chias behind and found ourselves again among a purely Chinese population. Hung-ai, "red precipice," was formerly called Pai-ai, "white precipice," and is celebrated in the ancient history of Yün-nan as the capital of one of the old kingdoms destroyed by Pi-lo-ko in 749 A.D.

On the 3rd we crossed another bare range into the Yün-nan Hsien plain. The road leaves the town a mile to the left, so we did not enter it, but passed the night at the village of Kou-ts'un-p'u. Yün-nan Hsien is a place of very small importance, and must not be confused with Yün-nan Fu, the capital of the province. The names of these places are identical, and as Yün-nan Fu is almost always spoken of as Yün-nan Sên[1], the two places are very likely to be mixed up by those not accustomed to the fine differences of sound of the Chinese language.

The next morning some heavy rain fell and the hills to the west were for a few hours white with snow. We had an almost level march through a plateau country among very low hills and small strips of cultivated land till we reached the Yün-nan-yi plain and, passing through the village of that name, put up in the top storey of a very large temple at Mu-pang-p'u.

We had the day before heard news of two foreign officials passing through Yün-nan Hsien. They were described as "one white and the other black," so we had little difficulty in recognising in this description Watts-Jones and his cook, who, being a Goa Portuguese, wore European clothes of sorts. By sending on a man with a letter we managed to catch him at the Ma-kai coal mine, which he had turned off the main road to look at, and the day after our arrival at Mu-pang-p'u he turned up.

These meetings in out-of-the-way places are always very pleasant, and we had much to talk about. Watts-Jones had found a practicable but difficult line for the railway to take. He had also with Ryder been up north to look for a line to the Upper Yangtze, and to examine the resources of the country north of Ta-li. They had reached Li-chiang Fu, which is the threshold of the Tibetan country of north-western Yün-nan, and from there, taking different routes, had turned southwards again, intending to meet at Ch'u-hsiung Fu. The country between Ta-li and Li-chiang they were delighted with. It is a region of lakes and fertile plains, and is agriculturally the richest part of Yün-nan.

The plains of Yün-nan Hsien and Yün-nan-yi which we

[1] *Shêng* (pronounced *sêng* or *sên* in Yün-nan) means a province, and is applied also to the capital of the province.

Photo by Captain W. A. Watts-Jones

A wayside tea-house on the Ta-li Fu–Yün-nan Fu road

had been passing through are, as far as I could see, entirely watered by lakes and ponds: there do not appear to be any running streams. They are much less fertile than the valleys further west, no doubt in consequence of the increased difficulty of irrigating the land where no running water is available.

What these plains lack in fertility is from the sportsman's point of view abundantly made up for by the quantities of geese and duck which one finds in the lakes. There were flocks of bar-headed geese all over the plain, and one could walk right up to within twenty or thirty yards of them before they would rise in a leisurely manner. Out of one flock I got six. Two fell to my first two barrels as they rose, and then the flock after flying round a short distance twice, again came over my head at close range, enabling me to get two more each time. This will seem incredible to those who know that very wary bird the wild goose, but I remember in India once, in the Aligarh district, finding a flock of these bar-headed geese equally tame. There was no sport in this, so when I had killed fifteen—enough to feast our followers for two or three days—I gave up shooting them.

However tame the geese may have been, the duck, though numerous, were by no means easy to get within shot of. The mallard and teal seem to be the commonest on the large lakes, and that small black and white duck called the tufted pochard on the smaller ponds.

From Mu-pang-p'u to Chên-nan Chou we took four days, moving very slowly, as Watts-Jones often had to leave the road and ascend hills so as to get a better view of the country. Our road led us at an average height of 7000 feet through a sandstone plateau country, with small hills rising up out of it, very dry and bare except for a few little fir trees. Villages are not numerous, and the cultivation is chiefly confined to strips of beans, opium, and wheat along the narrow valleys.

Just before reaching Chên-nan Chou we had made a halt to put up the plane table, when Ryder suddenly appeared coming in by a road from the north. So after being separated for three and a half months we hit each other off to a yard. He had gone from Li-chiang eastward

to Yung-pei T'ing, crossing the Yangtze by an iron chain bridge, thence turning south had recrossed that river by a ferry just above the mouth of the Ya-lung River and had come on through Ta-yao Hsien and Yao Chou.

Chên-nan Chou is considered one of the poorest towns in Yün-nan. It contains perhaps 500 houses, all very small. There is scarcely any trade in the place, and a great many Chên-nan men are obliged to hire themselves out as mule drivers in other places to get a livelihood.

Two easy days of level marching brought us to Ch'u-hsiung Fu, or Ts'u-hsiung Fu as it is invariably called in Yün-nan. The people of this town are peculiarly conservative and exclusive. They have such an objection to strangers that no inn is allowed within the city walls, and no one from any other town is allowed to establish a shop. When the telegraph line was first taken through here, there was much commotion, and so determined was the opposition of the townspeople to this new-fangled means of communication that the telegraph office had to be put inside the Colonel's yamen, the only place where it would be safe from destruction.

One might expect such a conservative place to be very anti-foreign. But such is not the case. We found the people civil and friendly, and the missionaries who visit the place occasionally get on well with them, though they had so far failed to establish a permanent mission station here.

We put up at an excellent inn in the suburbs, with a very large upper-storey room, which was just what we wanted, as we had much work to do in putting our maps together, while our evenings were fully occupied in getting the longitude from Bhamo by telegraph. We were not the only Europeans in Ch'u-hsiung at the time, for we found two members of the China Inland Mission, Mr Nicholls and Mr Saunders, on a temporary visit here. On the day after our arrival we had quite a dinner-party to celebrate the meeting of six Englishmen in the middle of Yün-nan.

We halted four or five days at Ch'u-hsiung and rearranged our plans. Watts-Jones started again on the 15th March to continue the survey for the line on to Yün-nan Fu. Ker, accompanied by Ram Sabad, one of

Photo by Mr J. S. Ker

Temple at Mu-pang-p'u

Ryder's surveyors, went off northwards on the following day to explore the approaches to the Upper Yangtze, in view of a possible alternative line up the Chien-ch'ang valley[1]. Ryder and I were still at work on the maps and the corrections of the spelling of names so did not get off till the 17th. I took the main road to Yün-nan Fu, while Ryder, so as to survey fresh country, made a detour to the south by Nan-an Chou.

One incident that happened during our stay in Ch'u-hsiung shows that however much the Chinese may hate and despise us, they have a great opinion of our medical skill. We were disturbed one morning by some shouting and by people all running together towards the house opposite, and on going to see what was happening, found a woman had tumbled into a well. The water was not very deep, so they let a man down by a rope and he pulled her up. She had apparently fallen in head foremost and had a very bad cut on her forehead and was much shaken.

We were at once applied to for medicine, and we doctored her forehead quite successfully with iodoform and, at the special request of her relatives, came to re-bandage her wound every morning. It healed up well, but on the third day she suddenly became much worse. She had probably received some internal injury as she was coughing and spitting blood a great deal, and said her throat felt stopped up. She begged for some sort of medicine that would do her good, but unfortunately we had neither the knowledge nor the medicines to help her, and could do nothing more than give her cough pills, which would probably do no harm, in hopes that faith in the medicine might help the cure. In the afternoon, when she felt herself sinking, she told them to go and call the "foreign official," but she died before we could be sent for.

On the 17th, Ryder and I both started by our different roads for Yün-nan Fu. I took two easy marches, first down the valley of the Ch'u-hsiung River and then over a dry, sandy, uncultivated range of hills, to Kuang-t'ung Hsien, a poor town of 250 houses in a small plain. The city walls were broken down in several places, an unusual thing in Yün-nan.

[1] Lat. 27° to 28° 30′, long. 102° 15′.

The following day we reached the large village of Shê-tzŭ. I had been expecting to hear news of Watts-Jones, as he was in front of me on the same road, but I was certainly astonished when on enquiring from some travellers coming from the other direction they at once said, "Oh yes! There are *three* foreign officers just in front of you." Who the three were I could not imagine, till it dawned on me a little later that the three "officers" were my own two Indian servants and the surveyor's cook, who had got a little ahead of me with the baggage. In these secluded parts of China they do not make such fine distinctions as to have a separate name for Europeans and natives of India. They are all classed together as "Yang jên," "sea men."

The next day, however, at the little mountain village of Ta-tz'ŭ-ssŭ we did really catch up Watts-Jones, who had been obliged to make considerable detours to get a practicable line for the railway. On this march we crossed the Hsiang-shui Ho, "noisy water river," a swift-flowing mountain stream which forms the eastern boundary of the jurisdiction of the Ta-li *tao-t'ai*. To the west this official exercises authority up to the Burmese frontier, so his district is an extensive one.

On the 20th we descended to Lu-fêng Hsien, a small town in a fertile and well cultivated plain, and crossing another range at 6,550 feet, slept in a large temple on the hillside above the village of Yao-chan-kai. Two more marches over a rather monotonous country brought us into An-ning Chou. This town contains perhaps 600 houses scattered over a wide space, and enclosed by a miserable little wall only 10 feet high. We were joined a few miles short of the town by Ryder, and we also had the pleasure of meeting here a French priest who was on his way back to his own mission station from a visit to the bishop.

On the 24th March we reached Yün-nan Fu and put up in a very bad inn in the suburb outside the south gate. Curiously enough the inns in the capital are by no means good. We naturally made enquiries about the few Europeans[1] who live here, and soon made acquaintance with

[1] The European community is now (1908) much larger. British and French Consul-generals are now established here, and there are also some officials of the French railway now being constructed from Tong-king to Yün-nan Fu.

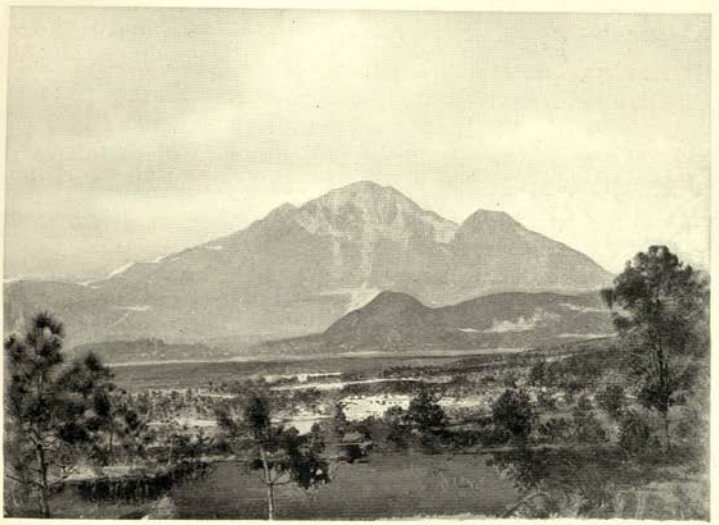


Photo by Captain W. A. Watts-Jones

The Li-chiang Fu peak, 18,000 ft.

Photo by Major H. R. Davies

Yün-nan Fu

Mr and Mrs Stevenson, and some other members of the China Inland Mission, who most kindly gave us much assistance in many ways. We were also fortunate enough to meet Mr Archibald Colquhoun, who has travelled much in China and other countries of the Far East, and had now come through Kuei-chou from the Yangtze and was on his way down to Tong-king. Mr Jensen, the Superintendent of Telegraphs, was away inspecting the line when we arrived, but soon afterwards came in. It was a great pleasure to renew acquaintance with him.

Our quarters at the inn were anything but pleasant, as the whole place smelt abominably, so Mr Stevenson kindly arranged that on Mr Colquhoun's departure we should go into the quarters he was occupying—a very nice little house in a small garden where we were free from all noise.

The town of Yün-nan Fu is by far the largest in the province. It is surrounded by a fine brick wall, 30 feet high, and measuring about $4\frac{1}{2}$ miles round. As usual in Chinese cities, a very large part of the population live in the suburbs, which extend to a considerable distance round three sides of the town. I should estimate the population, including suburbs, to be about 80,000, but this is not much more than a guess and I will not guarantee its accuracy.

The plain extends some 35 miles to the south and contains several other towns, but a large part of it is taken up by the K'un-yang Lake. There is a good deal of navigation by large sailing-boats on this lake, both for the conveyance of passengers and cargo, and by means of a canal things can be brought right up to the west gate of the city.

Mr Jensen took us one day to see the arsenal. This is in charge of Chinamen, who have learnt their work from Europeans at Nanking or Shanghai. They make Krupp guns, Nordenfeldts, and rifles and cartridges. The machinery was worked by steam, but they had no steam hammers, so that the work is not likely to be first-rate. What they were making principally at the time of our visit was an enormously heavy rifle, between six and seven feet long, for two men to fire. The man in front rests it on his shoulder while the man behind fires it. These weapons, they explained to us, are meant to defend the city walls.

The nominal head of the arsenal was also in charge of the Yün-nan telegraphs. He was a stout, pleasant old Manchu gentleman, who did not pretend to know anything whatever about either telegraphs or arsenals.

The weather since we left Ch'u-hsiung had been getting a little warm, but in Yün-nan Fu we had quite a change. A heavy thunderstorm ended in a fall of snow, which lay on the ground two inches deep for some hours. The height of Yün-nan Fu I made 6,700 feet, and its climate is never hot, 85° in the shade being about the maximum summer temperature. There are frosts in winter, but no very severe weather is ever experienced.

CHAPTER XXI

YÜN-NAN FU TO WEI-NING CHOU.

News of Pottinger—The roads from Yün-nan Fu to the Yangtze—Alternative routes to Ch'ü-ching Fu—Difficulties in getting the longitude—The Yün-nan Fu plain—Rows of cypresses—Irrigation wheels—Carts in Eastern Yün-nan—The dialect of Yün-nan Fu—Ch'i-tien—The Yang-tsung Lake—Yi-liang Hsien—A dry plateau—Sandstone pillars—A fine bridge—Lu-liang Chou—A temple converted into an inn—Yüeh-chou—Ch'ü-ching Fu—Mr and Mrs Allen—A fine plain—Trade—Salt monopoly—Duck shooting—Proclamations about Pottinger—Abundance of coal—Hsüan-wei Chou—Meet Watts-Jones again—Death of Mr Tucker—Chinese hams—"Foreign devil"—Retaliation—The T'ang-t'ang copper mines—The K'o-tu Ho—Source of the Canton River—Enter Kuei-chou province—A copper mine—Price of ore—A biting wind from snow hills—Wei-ning Chou—Its mines—Dense mist—Origin of the name Yün-nan—Meet Pottinger—His difficulties from weather and hostility of natives—His fight with the Chinese—No further trouble—Return to Wei-ning—Mining machinery—Coining of cash—Chinese currency—Their banking system—Arrival of Hunter—Our plans for the future.

WHILE in Yün-nan Fu we were able to get into communication with Captain Pottinger by telegraph. He had been much delayed in his work by rainy and misty weather, and by the hostility of the Chinese in Ssŭ-ch'uan, so that he was still a march or two short of Pi-chieh Hsien (lat. 27° 20′, long. 105°). He was now going to work on towards Yün-nan Fu, so we hoped to meet him at Hsüan-wei (lat. 26° 15′, long. 104°) or Wei-ning (lat. 26° 50′, long. 104° 15′).

I should mention here that from Yün-nan Fu to the Yangtze there are two main roads. One goes through Tung-ch'uan Fu and Chao-t'ung Fu, reaching the river at Hsü-chou Fu, or Sui Fu as it is more often called. The other, along which runs the telegraph line that links Yün-nan to the rest of China, passes through Ch'ü-ching Fu, Hsüan-wei Chou, and Wei-ning Chou, striking the Yangtze at Na-ch'i Hsien. It was this latter road that Pottinger

had adopted as most likely to afford the easiest line for a railway, so that it was by this route that we set out to meet him.

As far as Ch'ü-ching there are two alternative roads, so Watts-Jones, leaving on the 30th March, took the main road through Ma-lung Chou, while I, starting four days later, went by a somewhat less frequented route through Yi-liang Hsien and Lu-liang Chou.

Ryder had so far failed to get the longitude of Yün-nan Fu from Bhamo, owing partly to the difficulty of getting a strong enough current over this distance of 500 miles of telegraph wire, and partly to the frequent occurrence of breaks, and to the general neglect of duty by the telegraph clerks, under the slack administration of the stout Manchu gentleman who presided over this department[1].

Ryder therefore decided to stay on in hopes of fixing this most important point. As it turned out, he waited there a month and had then to give it up as a bad job. However we were luckily able to get satisfactory observations in the following year.

On the 3rd of April I was able to get away and started off across the Yün-nan Fu plain. Several things here strike the traveller arriving from the west as new and peculiar. The rows of cypress trees along the irrigation embankments are one of the most conspicuous features of this part of the country; and the curious wheels which, worked by hand, draw the water up from the lakes and ponds into the irrigation channels, are not found in the plains of western Yün-nan, where nearly all the water is running. It is true indeed that these wheels are used in Yün-nan Hsien and other places west of the capital, but I have never seen them west of Ta-li.

But what struck me as most extraordinary was the use of carts. These I certainly did not expect to see in western China. I subsequently found them in use in nearly all the plains of eastern Yün-nan. They are very small and are drawn by one bullock or buffalo. They are only used for

[1] Mr Jensen was in no way responsible for the frequent breaks which occur in the Yün-nan telegraphs. His work was to keep the electrical instruments in order. The upkeep of the actual telegraph wire is in the hands of Chinese, who make as much money out of it as they can.

farming operations and are not employed as a means of transport along the roads. This is no doubt owing to the impossibility in most places of taking them from one plain to another, though by a little construction of roads it would not be difficult to open a good deal of eastern Yün-nan to wheeled traffic. On the whole it is decidedly less hilly than the western part of the province, though in places, such for instance as the road from Wei-ning to Tung-ch'uan, there are as steep hills as I have seen anywhere.

My Chinese followers were much amused by the uncouth dialect of the inhabitants of the provincial capital. One would expect to hear the purest Chinese spoken in the chief city of the province, but such is not the case. They have a peculiar way of speaking which I believe they, as natives of the capital, consider to be the standard of excellence for the province, but this opinion is not shared by other Chinamen either of Yün-nan or of other parts of the empire.

My own impression, derived from hearing many Lo-los speak Chinese, is that their speech is simply Chinese spoken with a strong Lo-lo accent. The Yün-nan Fu plain was, I believe, formerly a Lo-lo country, and there are many families of Lo-lo origin still living there. Whatever may be the truth about this, it is needless to say that the present inhabitants of the city would only receive with derision any suggestion which imputed to them a Lo-lo ancestry or a Lo-lo accent. This dialect is confined to the people of K'un-ming Hsien, the Hsien district of Yün-nan Fu.

Our first march out from the capital took us to the small plain of Ch'i-tien. We made the usual late start, which I have always found it difficult to avoid in leaving a town after a few days' halt. Consequently, as the march was 18 miles and entailed crossing a range of hills, we did not reach our halting-place till after dark. I was now doing my own surveying, as Lachman Jadu, the surveyor who had been with me so far, stayed with Captain Ryder, so as eventually to return to India with him to help in compiling the maps.

On the 4th April, after crossing a low range, we descended to a fine lake called Yang-tsung Hai, and leaving

it on our right, passed through the village of T'ang-ch'ih, in the middle of which is a hot sulphur spring and a bathing-tank, much frequented by the rheumatic. After this we crossed another range, and descended steeply to the Yi-liang plain, which lies at 5,300 feet, an exceptionally low level for this part of Yün-nan.

The town contains about 800 houses and is surrounded by the usual wall, but most of the inns and shops are in a suburb outside the north gate. Their cotton and foreign goods reach them through Tong-king, and the only important local product is opium, which grows well here. The place is usually called Ni-liang by the Yün-nanese, and locally it is also known as Mi-liang.

The next day at the far edge of the plain we forded a river 70 yards wide, which runs down from Ch'ü-ching Fu, and then ascended on to a large plateau over which our route lay for the rest of the way to Lu-liang Chou.

This plateau ends to the north in a precipitous descent to the Ch'ü-ching River[1], while to the south the haze prevented me from seeing how far it extended. The general elevation averages well over 6000 feet, and it undulates so gently that carts are used all over it. There are a few fir trees in places, but the general character of the country is very bare and dry, with little rocky mounds rising out of it. Great pillars of sandstone rock 15 or 20 feet high standing in groups form a curious feature of the landscape, and might easily be taken for ruined buildings when seen in the distance through the haze. The crops in this plateau are very poor and scanty: opium seems to grow better than anything else.

After two days and a half over this somewhat monotonous country, we again reached the Ch'ü-ching River. Crossing it by a fine thirteen-arch stone bridge, 120 yards long, we soon entered Lu-liang, which lies a little higher up on the right bank. The river here has a slow current and a depth of apparently three or four feet, but lower down between here and Yi-liang it seems to run in a deep gorge, and I could hear of no road up its banks in this part of its

[1] I do not think that the Chinese call the river by this name in this part of its course, but as it runs down from Ch'ü-ching Fu, I have thought best to so name it.

course. This river I should mention is one of the sources of the West River of Canton.

Lu-liang Chou is one of the poorest towns I have seen, and is rather unlike the ordinary Chinese city, for, though it has a wall, the houses are much scattered about and the place is full of trees. There are scarcely any shops, and the people depend for their buying and selling on a market which is held every five days.

In spite of its poverty the town has a considerable reputation for scholarship, and many of its inhabitants are able to display over their doors the tablet which shows that they have taken a literary degree. We slept in a temple which an enterprising man had turned into an inn, and we were glad to find a watertight roof over us, for a very heavy thunderstorm burst in the evening.

From Lu-liang two level marches up the plain, through which the Ch'ü-ching River runs, brought us to Yüeh-chou. This is the place from which Momien derives its Chinese name of T'êng-Yüeh[1]. It still has walls round it, but is not now an official city, and much of the space inside it is taken up by fields, the main street of 200 houses being all that remains of the former town.

The next day, the 10th April, we reached Ch'ü-ching Fu, where I was hospitably entertained by Mr and Mrs Allen of the China Inland Mission. The town, which stands at a height of 6,450 feet, contains about 1000 houses, and lies in one of the finest plains in Yün-nan. The plain is continuous from beyond Chan-yi Chou, a town lying north of Ch'ü-ching, down to below Lu-liang Chou, a total length of 50 miles, with an average width of five miles. The upper half of this plain, down to below Yüeh-chou, is very fertile, but nearer Lu-liang there are not so many irrigated fields and the crops are poor. I saw oats growing in one place near Ch'ü-ching, a crop I had not previously noticed in Yün-nan. I think it is only cultivated in the north-eastern part of the province.

Ch'ü-ching lies a little off the main road, and is not therefore a great trading place. Its principal industry is the weaving of cotton cloth from Indian yarn, which is im-

[1] See p. 45.

ported from Hong-kong either through Tong-king or up the West River to Pai-sê.

We had not seen much signs of trade on the road from Yün-nan Fu here, and indeed it was hardly to be expected, as we had not been on what is considered a main road. Coming from the east we had met perhaps 200 or 300 coolies carrying earthenware cups and jars to the capital, from a place called Mao-mao-shih not far from Yüeh-chou.

The caravans going the other way were confined chiefly to mules loaded with salt. Yün-nan Fu is a great distributing centre of salt and tea. The former article comes from wells which lie north of Ch'u-hsiung Fu.

I had a little shooting in this Ch'ü-ching River plain. Near Lu-liang there were Brahminy ducks (Ruddy Sheldrake) feeding in the opium fields, and I found them quite easy to get up to. Baber also mentions that these birds are easy to approach in poppy fields. He suggests that they feed on the opium and get stupefied by it. This seems probable, as he is generally a very wary sort of duck. I also shot mallard, teal, and snipe in this plain, and near Ch'ü-ching got two widgeon out of a flock of a hundred or more on a small lake. This is the only time I have seen this duck in China.

Watts-Jones, who had, as I mentioned before, come by the main road through Ma-lung Chou, had passed through Ch'ü-ching on the 6th, so I was now following him on to Hsüan-wei.

Leaving Ch'ü-ching on the 11th we passed Chan-yi Chou, where our route rejoined the main road and the telegraph line. From here another very important road branches off eastward through P'ing-yi Hsien to Kuei-yang Fu, the capital of Kuei-chou province. From Kuei-yang Fu one road turns northwards to Ch'ung-k'ing, and another continues eastward through Hu-nan, till it strikes the Yangtze at the T'ung-t'ing Lake.

We went on a little further and slept at Chiu-lung-shan in a temple on a little island between two branches of the Ch'ü-ching River. Here my interpreter discovered an official notice posted up, referring to Captain Pottinger's party having been obstructed in two places, and warning everyone against interference with him, as he was survey-

Photo by Captain W. A. Watts-Jones

Temple garden at Hsüan-wei Chou

ing for a railway with the sanction of the Chinese Government.

Passing Sung-lin, a village of two hundred houses with a mud wall round it, we took two days to reach Pan-ch'iao at the southern end of the Hsüan-wei plain. The country is undulating, and one passes through a series of little cultivated plateaus, with low rocky hills rising out of them, and most of them without any running water. This part of Yün-nan is full of coal and hardly anything else is used as fuel. It is sold for 200 cash a cartload, which I calculate to be at about the rate of three shillings a ton.

On the 14th April I reached Hsüan-wei Chou, and found Watts-Jones there, established in a temple just inside the south gate. Here we were in telegraphic communication with the world again. Pottinger had arrived at Pi-chieh and hoped to meet us at Wei-ning Chou. We were very sorry to learn that Mr Tucker, who formed one of Pottinger's party, had returned to Ch'ung-k'ing suffering from pleurisy, and had died there of heart failure.

Hsüan-wei is a town of 800 houses and has two walls round it, one inside the other. The plain in which it stands is a poor one, but the whole country round is full of coal mines which, with better means of communication, might be extensively worked. Hsüan-wei is famous for its hams, which are excellent. Chinese hams vary very much. The best ones are very good, and this is the only form in which I ever ate pig in China.

After halting a day at Hsüan-wei, we left again on the 16th April, and soon found ourselves in a more hilly country. In these parts the Chinese are in the habit of shouting out *yang kuei-tzŭ*, "foreign devil," an expression one does not hear very often in most parts of Yün-nan. In Hsüan-wei we had heard the little boys shouting it out as we walked about the town, but they took care to keep at a distance, and the Chinamen nearest us always wore a look of almost too complete innocence.

However our time for retaliation soon arrived. The day we left Hsüan-wei, Watts-Jones and I had walked on a little ahead and passed five or six Chinamen sitting by the roadside. Directly we had passed, we heard shouts of "yang kuei-tzŭ." We turned back at once and our

friends instantly dispersed in different directions. However one of them was a slow mover, and we soon caught him and gave him a good thrashing. This, however, turned out not to be the man who had actually shouted, though I have no doubt his licking did him a lot of good. So we set to work to search for the real culprit, and soon found him hiding in a wet nullah. After a short interview, we left him begging for mercy, covered with mud and water, with a bleeding nose and various bruises all over him, so perhaps he will be more civil in the future.

This expression, *yang kuei-tzŭ*, has come to be the usual name for a European among the Chinese, and I have heard it used by ignorant countrymen in out-of-the-way places, evidently without realising that there was anything insulting in it; but when shouted out in this way as one passes, it can only be meant as an insult, which it is one's duty to resent.

On the second day out from Hsüan-wei we passed through the large village of T'ang-t'ang, lying in a narrow valley shut in by steep hills. This is the headquarters of the lessee of the copper mines in this neighbourhood. They get copper in many places near here, but they say the mines do not produce as much as they used to. We slept at Hsin-t'ien-p'u, at 7,250 feet. In the afternoon there was a heavy thunderstorm, which left a little patch of snow on one of the ranges.

On the 18th April after a long ascent we went downhill, very steeply, to the K'o-tu Ho, a river 20 yards wide, running with a rapid current over a rocky bed. In the dry season it is fordable, but later on in the year, when the rains are heavy, it gets very deep and is crossed by a ferry-boat, fastened to a wire rope which is stretched across the stream.

This river forms the longest source of the West River of Canton. It here marks the boundary between the provinces of Yün-nan and Kuei-chou[1], so that at Chan-p'o, where we slept, we were in the latter province. The hills of this part of the country are very dry, and the villagers

[1] To be exactly accurate, there is a narrow strip of land on the left bank of the river which belongs to Yün-nan.

Plate XXXVIII

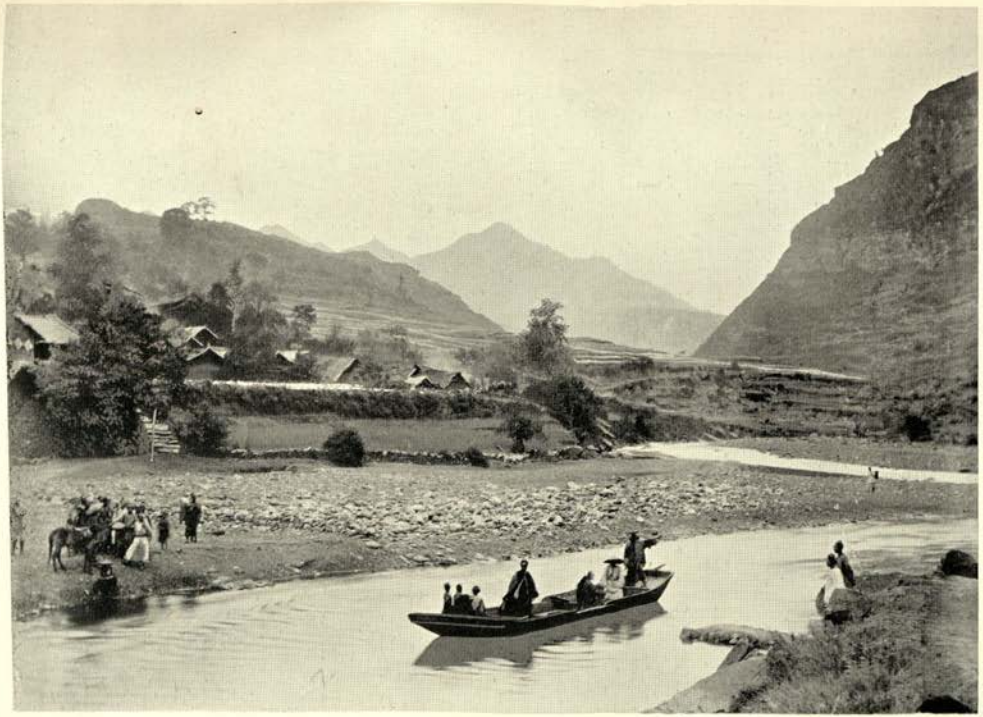


Photo by Captain W. A. Watts-Jones

Ferry over the K'o-tu Ho

here asked us to show them where to dig for water. The Chinese often credited us with the power of seeing what is under the earth. I suppose the idea is derived from embroidered narratives of the exploits of mining engineers.

The next march, over a dry, hilly country, brought us to Yao-chan, where we halted for a day as Watts-Jones had to go up a hill to the east to get a better idea of the lie of the country. I took the opportunity to go up another hill to the west to do some surveying, and to visit a copper mine about two miles off.

This mine, they say, was formerly very productive and 2000 men are said to have found employment here. At the time of my visit there were not more than 100 miners at work. They live in little huts scattered about the valley, and there are three furnaces constantly kept burning to smelt the ore they dig out. The ore is mined out of the solid rock of which the hill is formed. There are no deep shafts: they cut caves out of the hillside, and the miners often live in the caves they are working in. They use hammers and iron wedges, and they say a man can get out a mule load of ore in two days. The ore varies a good deal in quality, and is sold for from two to seven mace a mule load. Taking a load as 130 lbs., this comes to from sixpence to one and ninepence for 100 lbs. The best ore is of a purple colour and is said to produce 10 per cent. of copper.

The lessee of the mine pays 500 or 600 taels a year to the Government for the right of smelting, and the miners are obliged to sell the ore to the lessee. The copper produced is sent to Kuei-yang Fu, the capital of Kuei-chou province, and is there used for coining into cash.

The hill-tops in this part of the country rise to about 8000 feet, and they all had snow on them, which, combined with a biting north wind, made this one of the coldest days I have ever felt in western China.

On the 21st April we crossed a range, and skirting the edge of a large lake reached Wei-ning Chou, which is built on its further shore. The walls enclose a large space, but it is chiefly filled with temples, including a very large red Confucian temple. There are not more than 600 houses in the place, half within the walls and half without.

It is a very poor town with really nothing to call a plain, and all the rice has to be imported from Chao-t'ung Fu and elsewhere. Maize and beans are the principal food of the inhabitants. There are no large merchants here and very little trade is done except in the necessaries of life. Cotton cloth and any foreign goods that there are come from the Yangtze, and salt also comes from Ssŭ-ch'uan.

The only importance of the Wei-ning district lies in the mines—copper, silver, lead, iron, and zinc. With good communications these could no doubt be profitably worked. The height of Wei-ning is 7,500 feet, and it is a very cold place.

As Pottinger had not yet arrived I went on the next day along the Pi-chieh road, while Watts-Jones did some more surveying to the east of Wei-ning.

Going gradually up a range of hills, my road led me over a series of small steep-sided plateaus, with no outlet for the water. I slept at Ssŭ-p'u at 8000 feet. For the last few miles of this march we were in a dense cloud, so that it was impossible to do any surveying beyond a mere traverse of the road. This is the sort of weather which is, I believe, prevalent throughout Ssŭ-ch'uan in the cold season. The name Yün-nan means "south of the cloud," and it is natural to suppose that the province was so named as lying south of the clouds and mist which prevail in Ssŭ-ch'uan, and even in north-eastern Yün-nan, for such a great part of the year.

On the 23rd April I met Pottinger at the little village of Hun-shui-t'ang. Hunter, who was doing the surveying, was still 30 miles behind, as he had found great difficulties in this part of the line. So we decided to go to Wei-ning and await his arrival there.

The misty and rainy weather had made surveying most difficult for Pottinger's party. They had sometimes been for days together enveloped in thick fog, which made it absolutely impossible to see the lie of the country or to do any useful work.

Besides this they had encountered much hostility from the natives of the country. A hundred men or so would collect, and roll down stones on them from the hill-tops

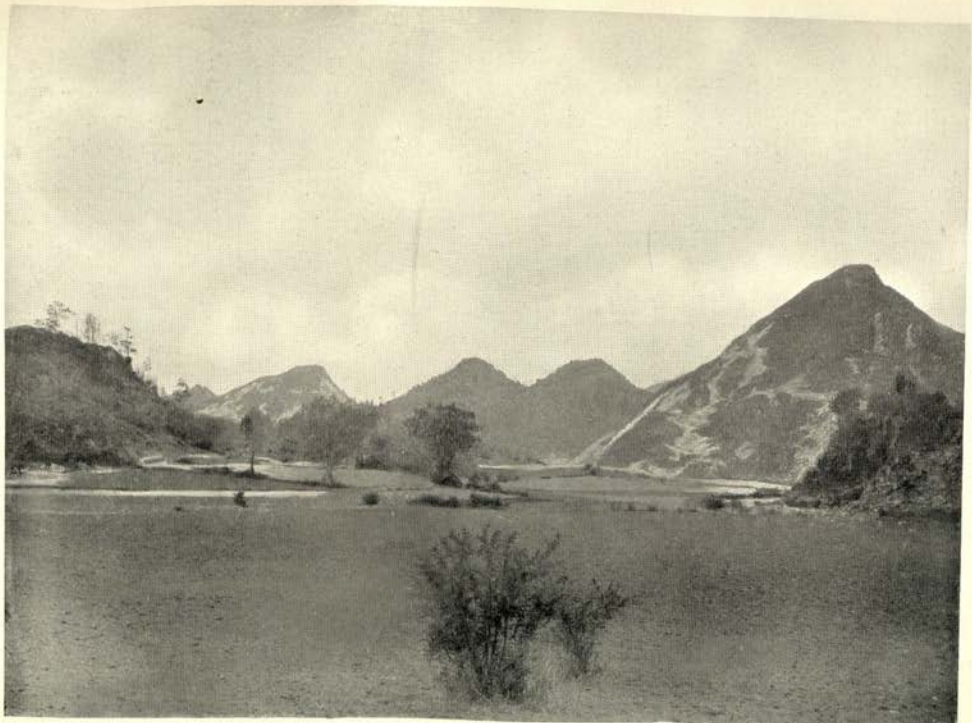


Photo by Captain W. A. Watts-Jones

On the Wei-ning plateau

and fire at them with guns. Their shooting was so bad that no one was ever hit, and they would run away if attacked, but this sort of thing naturally interfered with survey operations. The officials were always friendly, and increased Pottinger's escort of Chinese soldiers to 150 men, 20 of whom were armed with mausers.

Even in Kuei-chou province on this side of Pi-chieh these attacks began again, and Pottinger warned them that if there was any more opposition to his movements he would fire on them. The next day they began rolling stones down again, and Pottinger and Hunter attacked them with the twenty mauser-armed Chinese soldiers. Three of the Chinese were killed, and there was after that no further trouble.

These disturbances were probably due to the rebellion of Yü-man-tzŭ, which spread over a great part of Ssŭ-ch'uan the year before, and had hardly been repressed at the time Pottinger was passing through that province.

We got back to Wei-ning in two days and found that Watts-Jones had also returned there. We put up in very good quarters in the mining office. They have a lot of boilers and other mining machinery here, which are the property of the Yün-nan Province Government, who have never used them and want to sell them, but are hardly likely to find a purchaser here.

We halted the next day to wait for Hunter, and went to call on the civil mandarin and on the general. The former showed us his mint where cash are coined. They are made of a mixture of copper, lead, and zinc which when melted is poured into a mould which makes 200 or 300 cash at once. Not many are coined here: most of the copper is sent to Kuei-yang, the capital of the province.

The price the Government give for copper is 11 taels for 100 catties. This comes to about threepence a pound, a price which, the mandarin says, is not enough to make copper-mining pay. This I can well believe. I have often wondered how cash could be coined so as not to cost more than they are worth as money, but no doubt at this price it can be done.

The cash is the only real coin that exists over the greater part of China. Roughly speaking its value is about a tenth

of a farthing, so that it is impossible to take large sums about in this form. One has, therefore, to carry lumps of silver, which, in order to make small purchases, one has to weigh and exchange into cash at so many to a tael[1]. The exchange differs enormously in different towns of the same province even. I have in Yün-nan got as many as 1,400 cash for a tael and as few as 950. Sometimes too, to make it still more confusing, there are two sorts of cash, big and small, which naturally have different rates of exchange. Money-changers do a very profitable business, as in each string of 100 cash there are always two or three short. This is a recognised thing, and besides this legitimate profit, they make more by charging the unwary a higher rate than the market tariff.

The amount of silver which the traveller has to carry about with him, besides being a serious addition to the weight of his baggage, is always a source of anxiety. There is the danger of theft, and the possibility in a rough country of the box containing it tumbling into a river. Happily it is not necessary to carry in silver the whole of the money necessary for a long expedition. There is an excellent system of banking throughout China, and credit notes obtained from Mandalay or Bhamo can be cashed at the branches of the same firm at Hsia-kuan, Yün-nan Fu and other places.

Hunter arrived on the evening of the 26th April, and we were able to make our plans for the future. The country between Wei-ning and the Yangtze had been found so difficult that it was necessary to see if a better line could be discovered by any other route. Pottinger and Hunter were therefore to go to Chên-hsiung Chou (lat. 27° 30′, long. 104° 45′) by different roads, and from there if possible to separate again and find different ways to the Yangtze. Watts-Jones was to strike across to Chao-t'ung Fu (lat. 27° 20′, long. 103° 40′) and on to the Yangtze at Sui Fu. Myself, I had to meet Turner and Ker at Yün-nan Fu, so I turned westwards again, taking the road for Tung-ch'uan Fu (lat. 26° 25′, long. 103° 10′), so as to see unexplored country.

[1] A Chinese weight of about 1⅓ oz., and worth at present about three shillings.

CHAPTER XXII

FROM WEI-NING CHOU BACK TO YÜN-NAN FU *VIÂ* TUNG-CH'UAN FU.

Part from Watts-Jones—Watershed of the Yangtze and the Canton River—A mass of steep hills—White wax insect—The Niu-lan Chiang—Zinc smelting—Kung-shan—Lead, silver, and zinc mines—Tung-ch'uan Fu—Weaving—Copper mines—The Yi-li Ho—A high plateau—Wooded country—Curious rice husking machine—Cuckoos—Hsün-tien Chou—Sung-ming Chou—Lose the way—Reach camp at dark—A country full of pheasants—Reach Yün-nan Fu—Meet Ker—Results of his explorations—Ryder's movements—Arrival of Turner.

WATTS-JONES and I left Wei-ning on the 27th April. Our roads were the same for the first five miles, leading along the northern bank of the Wei-ning Lake, till we crossed its outlet by a bridge at Ta-ch'iao. Here we separated. My road led over undulating ground among clumps of fir trees to the little village of Shuang-lung-ch'iao where I pitched my tent.

On the 28th 18½ miles of hilly marching, over a country sparsely inhabited by Lo-los, brought us to Ch'ing-mo-ti. The next day we crossed a range at 8,150 feet and descended by a path, the last part of which was almost precipitous, to the small village of Ch'ia-hsi-ho.

The ridge crossed on this march is a spur running out from the main range which lies a few miles to the south and forms the watershed of the Yangtze and the Canton River. I do not think I have ever seen such a mass of steep broken hills as this country presents. The hill-sides are very barren and dry, and many of them are too steep to be climbed, so that the roads have to follow the beds of streams. Maize is the chief thing grown by the few villages that there are.

This was the first district in which I came across the white wax insect: most of the villages about here rear

them. They plant a particular sort of tree to breed them on. The insects consist of a soft brown shell full of a mass of very minute grubs. Some of these are kept for breeding and are put into little bundles of straw and fastened on to the tree. These little grubs after about a month come out of the shell and spread all over the tree. In a year's time each of these has produced its nest of grubs, and the crop is gathered and sold to men who come chiefly from Ssŭ-ch'uan and Hu-nan. The price is 20 taels (about £3) for a man's load of 50 or 60 lbs. of insects.

The load being so valuable, great care is taken that the grubs should not be prematurely hatched out of their shell by the heat. The porters travel very quickly and only in the cool of the night. On arrival at their homes in Eastern Ssŭ-ch'uan or Hu-nan, they place the insects out on another sort of tree, and in course of time they come out of the shell and spread over the tree and produce wax. When the deposit is complete, as much as possible is scraped off, and the branches are then boiled so as to extract every particle of wax.

The white wax which these insects produce is much valued as it will stand a greater heat without melting than any other substance of this sort. It is used therefore principally in the manufacture of candles, as an outer coating to prevent the candle guttering. The gathering and selling of the crop of insects was in full swing as we passed through this part of the country at the end of April[1].

The next day we crossed the Niu-lan Chiang which is only 40 yards wide at the San-tao-kuai ferry but has a strong current and runs in a deep gorge. This river, which is the outlet of the Yang-lin Lake, is navigated by boats in some parts of its course. It forms here the boundary between Kuei-chou and Yün-nan, so that we were now again in the latter province after having been for the last twelve days in Kuei-chou.

The inhabitants of San-tao-kuai get their living by smelting zinc. The zinc ore is placed in conical shaped earthenware cups. When heated, the zinc rises from the ore in the shape of gas and collects on a sort of shelf inside

[1] For a full account of the White Wax Insect see Hosie's *Three Years in Western China*, Chapter XI.

Photo by Captain W. A. Watts-Jones

Carrying white wax insects

the cup near the top. The zinc is sold at about 1½*d.* for 1 lb., and is most of it sent to Yün-nan Fu to be mixed with copper to make cash.

After crossing the river we had a very steep climb of more than 3000 feet, reaching the top of the range at 8,600 feet and descending slightly to Kung-shan, a large mining village. The mine manager was a travelled man who had visited Shanghai, and I found him very civil.

Lead and zinc are the two chief minerals, and the lead ore also produces a small quantity of silver. I was told that the output of lead averages 400 lbs. in a day. The zinc is got out of very deep shafts, extending they say several *li*[1] into the hill-side. I did not test the exact accuracy of this statement, but I went a little way down one shaft and it certainly seemed to be a deep one. They are not sunk straight down but are sloped so that a man can walk down them, though the passage is so low that he has to keep in a bent position most of the way.

On the 1st May our road led us down a narrow valley to the Chê-hai plain, which is about seven miles long and contains a small lake and several villages. The next day after crossing a low range we reached Tung-ch'uan Fu where I was kindly put up by Mr and Mrs Grist and Dr Hicks, the missionaries there. The official then at Tung-ch'uan was a very enterprising man who had established a manufactory of cotton cloth. The yarn is from Bombay, imported by Shanghai and the Yangtze. There was no European machinery: they used the ordinary Chinese looms.

The town walls of Tung-ch'uan do not enclose much space, but there are a good many people living outside the gates, and the whole town and suburbs must contain about 1000 houses. The population appear to be very friendly to foreigners.

The plain is some six miles long by three miles wide. It grows rice well, but the winter crops do not seem to flourish, and the soil does not suit opium. Like Wei-ning

[1] The *li* is a Chinese measure of distance. Theoretically it is about 600 yds. but practically it varies in different parts of the country. In the hilly parts of Yün-nan it runs about five to the mile. Ten li may be usually taken as an hour's march, so that used in this way as a unit of time it is a very useful measure.

the chief importance of Tung-ch'uan lies in its mines. I had not time to visit any of these, except those at Kung-shan, but there are several productive copper mines in the district.

The height of the town I made 7,250 feet. It is a cold place, with a climate more cloudy and rainy than the parts of Yün-nan lying further to the south or west of it.

My route from here on to Yün-nan Fu took me along the main road which connects the Yangtze at Sui Fu with the capital of Yün-nan. I was here again out of unexplored country, as Doudart de Lagrée, Baber and others, not to mention many missionaries, had travelled the road before me. I still kept up the survey as no very satisfactory maps had been made of this country.

Turning off from the Tung-ch'uan plain near its western end, our road led us up the Yi-li Ho by a narrow valley with hills rising to 9000 feet on either side. This river is 30 or 40 yards wide and is fordable in many places, but is deep enough to be navigated by boats which bring down timber and firewood to supply Tung-ch'uan.

Up this valley we marched for two days and then ascended very steeply on to a ridge and along it, the highest point reached being 9,300 feet. To the north-west a long distance off two very high peaks were visible which I estimated at 14,000 feet. We had now got on to a bare plateau country with considerable stretches of flat ground and small hills rising 300 to 500 feet out of it. We slept on the 5th May in the large temple of the village of Lai-t'ou-p'o at 8,500 feet.

The next day we continued our march over the same plateau country. Villages are scarce here, and there is very little cultivation owing to lack of water. At the end of this march of 18 miles the road descends to Hsiao-lung-t'an which is near a small tributary of the Yangtze.

On the 7th after descending to Kung-shan, our road led us up a narrow cultivated valley, ending with a slight ascent to Liu-shu-ho. The country here is more wooded: the hills are covered with firs, and I pitched my tent in a grove of chestnut trees.

I saw a curious rice husking machine here. It consisted of a wheel in an upright position which wheeled round and

round in a circular furrow, into which the paddy was thrown. It was worked by a water-wheel which revolved horizontally like a turbine, teeth being arranged all round the outer edge of its top surface to catch the water.

We had heard cuckoos everywhere round us for the last few days. The bird appears to be the same as the English cuckoo, and in western China as in England it makes its appearance in April, though I think in the Shan States I have heard it as early as March.

My mules went straight along the main road to Yang-kai the next day, but I made a slight detour to see Hsün-tien Chou which lies a little off the road. It is a small, poor town in a rather well-cultivated plain with the upper waters of the Niu-lan Chiang running through it. The Tao-t'ai of eastern Yün-nan has his residence here. His district comprises Chao-t'ung Fu, Tung-ch'uan Fu, and Ch'ü-ching Fu.

It rained most of the day and we did not reach Yang-kai till seven in the evening, as the march with the circuit to Hsün-tien must have been 24 miles.

The next day we passed Sung-ming Chou which lies a mile to the right of the road[1]. The town is a small one, but it stands in a good plain, measuring about 10 miles each way. Exceptionally fine opium is grown here and at Yang-kai. The poppy flower of Yün-nan is usually white, the next most common colour being mauve or purple. Scarlet poppies are occasionally seen but they are not common.

After crossing the plain the road leads over a lot of uncultivated undulating ground. As there was some delay in changing our escort at Sung-ming, I went on without a guide. Going off to the right of the road to put up my plane-table, I tried to make a short cut back, and got on to the wrong path, a mistake which we did not discover till we met a man a mile or two on. We then struck across to the left but found so many well used tracks made by timber-hauling from the fir woods in front of us, that it was most difficult to pick out the right road. We could see no village and could find no one to ask the way of, and as it was

[1] What is considered the main road passes a little further to the east through Yang-lin, but the route I took is rather the more direct of the two.

getting dark I began to think we were in for a dinnerless bed in the open. However on climbing on to a little ridge we were able to see some smoke which we made straight for. Luckily it turned out to be Shang-tui-lung, the very village we were to sleep at, and we found our mules arrived and tents pitched.

The following day, the 10th May, we started through a country full of pheasants, and crossing a range at 7000 feet, descended a little into the Yün-nan Fu plain and reached the town in the evening. Mr Ker had also arrived the same day, so we were both in on the exact date that we had agreed to meet when we separated at Ch'u-hsiung in March. To keep up to time I had been obliged to do 65 miles in the last three days, longer marches than I have usually done when keeping up a survey, and longer indeed than pack mules would be capable of getting through in a continuous journey of several months.

Ker had been as far north as Hui-li Chou and had with Ram Sabad, one of the Survey of India surveyors, mapped a good deal of the very intricate country in that part of the Yangtze basin. His observations gave very small hope of finding a practicable line for a railway in that direction, and the correctness of his views was borne out by a further survey made in the following year.

Captain Ryder, I learnt from Mr Stevenson, the missionary here, had waited on a long time at Yün-nan Fu in hopes of getting the longitude, but finally had to give it up, and left on the 23rd April, going by a circuitous route through Lu-nan Chou and A-mi Chou to Mêng-tzŭ. From there he turned eastward to K'ai-hua Fu, and made his way thence by a direct road to Lao-kai on the Red River, the frontier town of Tong-king. From there he returned to India.

Ker and I had arranged to meet Turner at Yün-nan Fu, and we had not long to wait, for he came in two days after us. He had gone from Hui-li to Tung-ch'uan, and from there had come by the same road that I had followed to the capital.

CHAPTER XXIII

YÜN-NAN FU TO THE RED RIVER.

Beginning of the rainy season—Ch'êng-kung Hsien—Chin-ning Chou—A lake country—Picturesque village—The T'ung-hai plain—Separate from Turner and Ker—Their subsequent travels in the rains—Impassable roads—The Chinese francolin—The Ch'ü Chiang valley—The Lin-an plain—An open plateau country—Mêng-tzŭ—Its European population—Attack on the foreign settlement—The trade of Mêng-tzŭ—Devil's punch-bowls—No inns—An unhealthy village—The Red River at Man-hao—Down the rapids by boat—A French fort—The French frontier.

FROM Yün-nan Fu I was to return to England *viâ* Tong-king to report on the results of our expedition, while Mr Turner and Mr Ker were to make their way back to Burma. As however they wished to visit a gold mine at T'a-lang T'ing, north-east of P'u-êrh, we all left Yün-nan Fu together.

We started on the 15th May in pouring rain, which made things most unpleasant, for in Yün-nan, as in Burma, the rainy season begins in the latter half of May. After an easy march down the plain which borders the K'un-yang Lake on its eastern side we reached the little town of Ch'êng-kung Hsien.

Continuing our march the next day down the same plain we passed through Chin-ning Chou, a walled town of 700 houses, whose narrow street was densely packed with people, as we happened to strike it on a market day. We went on another six miles and slept at Hua-lo-ts'un, villages being as a rule pleasanter places to pass the night in than towns.

From here we left the basin of the K'un-yang Lake and crossed a range at a low gap, descending to another large lake called Ch'êng-chiang Hai. The road leaves this on its left and, passing through the little town of Chiang-ch'uan, reaches Hai-mên-ch'iao. This village is picturesquely placed

between the little Chiang-ch'uan Lake and the hills to the east of it, just at the point where a stream connecting it with the Ch'êng-chiang Hai forces its way through these hills.

The village has some nice trees and looks well from a distance: inside are the usual pigs and dirt. Its height is just under 6000 feet, the first time for six weeks I had camped at such a low elevation.

On the 18th, crossing a low range of hills, we descended to the lake of T'ung Hai, and, rounding its eastern end, reached the town of that name. The plain round the lake is well cultivated and there is a ring of large villages round it. The town though not very big is decidedly prosperous and has a good deal of trade. We found kerosine oil in general use here for lamps, a sign that we were approaching the civilisation of Tong-king.

From here Turner and I separated, his road branching off in a more westerly direction. Ker had left us two days previously to find a way from Chin-ning to T'a-lang, thus getting more country surveyed than we otherwise should have done.

Turner and Ker met at T'a-lang and were able to visit the gold mine, which they found a productive one in spite of the very crude machinery used. After this they had a most trying journey over roads rendered nearly impassable by heavy rains. They followed up the course of the Pa-pien Chiang (Black River) for several days, turning westward from near the south end of the Ching-tung T'ing plain. Ker crossed the Mekong to Yün Chou, and from there went northward to Ta-li Fu, where he met Turner, who had come there by a more direct route. They did not reach Burma till August. Travelling in Yün-nan in the rains is not a pleasant experience. It was quite an exceptional circumstance for them not to be wet to the skin on every march, and their rate of progress was sometimes not more than a mile an hour.

It had rained almost unceasingly since we left Yün-nan Fu, so it was pleasant to start the next morning in fine weather, with the cheerful call of the Chinese francolin all round us. This bird closely resembles the painted partridge of southern India, and is the common partridge of Burma

and of the Shan States and the lower lying valleys of Yün-nan; but I have never before or since seen it at anything like such a high elevation as 6,200 feet, which is about the height of the T'ung-hai plain.

Crossing a range of hills we descended steeply down a narrow gorge to the Ch'ü Chiang valley, which being only 4,800 feet is warm enough to grow sugar cane, a valuable product in Yün-nan. The river which waters this valley is 100 yards wide and is fordable at this time of year, being also crossed here by a wooden footbridge. Later on in the rains the water rises and mules have to cross by a bridge two miles lower down, just where the river leaves the plain.

I have reason to remember the footbridge, for the man who was in charge of my pony, so as not to wet his own feet, tried to lead him over the bridge. As it was made of narrow planks not very carefully joined together and the whole structure was decidedly shaky, the natural result was that the pony fell off it when he had got half way across. It was an anxious moment when I heard a shout from behind and looked back to see the pony hang for a moment and then fall. Luckily he was not hurt, though there was a considerable drop.

Our hopes of getting through the day dry were disappointed, as, before we could reach our night's quarters at Kuan-yi, a heavy thunderstorm burst, which wetted us to the skin in a few moments.

On the 20th May a march of 17 miles took us to Hsin-fang, a village in the Lin-an plain, where we put up in a temple. We were below 5000 feet here and in a much warmer climate than the traveller in Yün-nan is accustomed to, while the mosquitos reminded us that we were now in the rainy season. Luckily we had a clear night and I was able to take the latitude, the only observation I got between Yün-nan Fu and Tong-king.

The town of Lin-an Fu lies five miles off the road to the south and I had not time to visit it, but I made a slight detour the next morning to the top of a low spur, and I was able to fix its position.

The town is said to contain 1000 houses: it lies in a plain of considerable extent, but only narrow strips along

the two streams that water it are irrigated: the rest of the plain lies too high and is consequently little cultivated. The natives of Lin-an, like those of T'êng-yüeh, have a strong antipathy to anyone who has not had the good fortune to be born a Chinaman. So far do they carry their hatred of everything foreign that they even refuse to weave their cloth out of foreign yarn. They import their material for making clothes in the shape of raw cotton from the Shan States. Such at least was the case at the time of my visit.

Three days from Hsin-fang, over a fairly open plateau country, brought us to Mêng-tzŭ[1], where I was hospitably entertained by Mr and Mrs Spinney of the Imperial Maritime Customs.

This place was only opened as a treaty port in 1889. The foreign settlement is pleasantly situated outside the town, the European community at the time consisting, besides the Customs Staff, of a French consul, a doctor, and one French merchant. The well-built, well-furnished houses in which they lived made one feel that one was in civilisation once more.

Mêng-tzŭ was considered a very quiet place, and the inhabitants of the town were extremely civil and fairly free from curiosity. But only a short time after my visit the Europeans there had a very unpleasant awakening from their sense of security.

In the middle of the night the foreign settlement was attacked by a large armed mob recruited principally from the workers in the Ko-chiu tin mines. The foreign community, among whom at the time were several French officers, concentrated in the French Consulate and made good their defence. The rioters, however, killed two Chinese servants and burned or carried off everything from the remaining houses.

Mêng-tzŭ is a busy place for Yün-nan, and even though the rainy season had begun I must have met quite 1000 loaded mules since leaving T'ung-hai. They were most of them carrying cotton yarn imported from Bombay *viâ* Hong Kong. This Indian yarn is cheaper than the Man-

[1] Sometimes spelt Mêng-tsz' or Mong-tze.

Photo by Major G. C. Rigby

Country between Mêng-tzŭ and Man-hao

chester product and is rapidly supplanting the latter in western China.

The height of Mêng-tzŭ I made about 4,700 feet, and the climate is pleasantly cool. The inhabitants of the surrounding country belong principally to the P'u-la and other tribes, speaking dialects of the Lo-lo type.

After spending two very pleasant days here, I started for the Red River, taking three days to do the 30 miles which separate Mêng-tzŭ from Man-hao. The country passed through is curious, consisting chiefly of a mass of small basins with no outlet for the water. These "devil's punch-bowls" are characteristic of a great part of the eastern and south-eastern parts of Yün-nan.

Another curious and unpleasant feature of the road from Mêng-tzŭ to Man-hao is the entire absence of any sort of inn accommodation for men. There are large stables for mules at the recognised halting places, but no provision is apparently considered necessary for human beings who are so ill advised as to take a road which leads into countries outside the borders of the Middle Kingdom.

As it rained on and off, I had to sleep beside my mules on the first night, and on the second to squeeze into an extremely small temple already occupied by a tax collector and his clerk. The country passed through is very poor and thinly populated. The village of Yao-t'ou, where I slept my second night, is considered too unhealthy to live in by the Yün-nanese, and is inhabited by Cantonese who have found their way there through Tong-king. Its height is over 4000 feet, but it is placed in a narrow valley much shut in by hills, which perhaps accounts for its bad reputation. The name Yao-t'ou means "shake head," and is said to have been given to it because everyone who sees it shakes his head in disapproval.

From here, after a little up hill, a very steep descent in pouring rain brought us down to the Red River at Man-hao at a height of 600 feet. The village contains 100 houses, inhabited by Cantonese Chinamen and Shans. Small boats can go a considerable distance further up the river, but Man-hao is the limit for large boats and may be considered as practically the head of navigation.

Mr Spinney had kindly arranged about a boat, so I was

able to leave Man-hao the same day. The boats are some 50 feet long and 10 feet wide across the middle. They are said to carry a load of 10,000 lbs. I found plenty of room in one for myself and five followers and our baggage, besides the six men who formed the crew. The boat is got along by rowing, the crew having occasional "easies" during which we drifted down at a good pace, as the current is strong.

Three and a half hours' rowing brought us to the village of Hsin-kai, where we halted for the night, as boats cannot run after dark owing to the rapids. It poured with rain all the night through, and the matting roof of the boat was by no means equal to keeping out such a torrent.

Starting again at dawn the next day we went on at a good pace, negotiating several rapids, in one of which the boat struck a rock, but without doing any damage. The first sign of the French was the tricolor flying over a small fort on the right bank. This was Lung-po, the frontier post in this direction. From here down to Lao-kai the Red River is the boundary between Tong-king and China.

At half-past one we reached Ho-k'ou, just 24 hours from Man-hao, but of this time we had spent nearly 12 hours tied up at Hsin-kai. Ho-k'ou is a village of 500 houses or so, and is the last place in China in this direction, Lao-kai, the French frontier station, being separated from it by the Nam Ti or Nan-hsi Ho, which here joins the left bank of the Red River.

CHAPTER XXIV

THROUGH TONG-KING.

Ho-k'ou and Lao-kai—A French frontier station—The Foreign Legion—Arrival of M. Doumer the Governor-General—His rapid journey—Chinese view of his energy—A small stern-wheeler—Yenbay—Hospitality of French officers—Hanoi—Haiphong—A French ship with no French officers—The officials of Tong-king—The commerce of Haiphong—The finances of the colony—A cargo of pigs and chickens—Hong Kong—By P. and O. to Marseilles.

AT Ho-k'ou I was very kindly put up by Mr Bono, of the Chinese Maritime Customs. We crossed over to Lao-kai in the evening and I made the acquaintance of the Colonel commanding the district, who was very pleasant and asked us into the Military Club.

Lao-kai is quite a small place, containing perhaps 100 houses. A little above the town are some barracks and the commandant's house, and above these again a small fort. Beyond this there is very little; and low hills covered with jungle come down close to the barracks. On the opposite bank of the Red River is Kok-lio, and it is here that most of the garrison are quartered, consisting of a few companies of the Foreign Legion and of Annamite Tirailleurs.

All the part of Tong-king that lies above Yenbay was still under military administration. It had, however, by this time pretty well quieted down, and the credit for its pacification is given to Colonel Pennequin, who commanded and administered the district till a year or two before.

The Foreign Legion have done a great deal of the desultory fighting that has taken place since the French occupation of Tong-king. They consist in great part of Alsatians, Swiss, and Belgians, with a certain number of Germans, and a few men from nearly every country in Europe, Englishmen and Americans being fewer than

almost any other nationality. There are even some Frenchmen among them, for very few questions are asked when a man is enlisted. Many of them are men of bad character, but they are kept under very strict discipline, and are good fighting material. The officers are French, and as the Foreign Legion sees a great deal of service, they have no difficulty in getting good officers to volunteer for this corps.

On the following day M. Doumer, the Governor-General of French Indo-China, arrived at Lao-kai, and there was great playing of bands and firing of salutes, followed by a torchlight procession in the evening. He was on his way to Yün-nan Fu to see the Viceroy of the province, chiefly I believe to arrange matters about the railway that the French are making from Tong-king. I had met a large party of their engineers between Mêng-tzŭ and Man-hao, and the preliminary survey for the line had been already done[1].

M. Doumer is a particularly energetic man, and he left the same night on his journey up the river, and I believe rode the distance from Man-hao to Yün-nan Fu in an extraordinarily short time. This display of energy would excite the admiration of a European, but unfortunately it is not calculated to impress the Chinese. For a high official to be in a hurry is not at all according to etiquette. His rapid movements probably gave them the impression that he was in some difficulty from which only the immediate assistance of the Viceroy of Yün-nan could extricate him.

The Governor-General's arrival was a fortunate event for me, as instead of waiting nearly a week for the next mail steamer I was able to get a passage down the river on the boat by which he had come up. The "Bao-ha," as she was named, was a small stern-wheeler 80 feet long and drawing only 60 centimetres. She was one of the steamers specially made for the navigation of the upper part of the Red River.

Leaving Lao-kai at eight in the morning we got through the 105 miles which separated us from Yenbay before dark in the evening. The river, 200 yards wide at Lao-kai,

[1] For an account of this line see pp. 330, 331.

begins to broaden out to a width of a quarter of a mile a short distance above Yenbay, and the current here becomes perceptibly slower. The population appears to be sparse and hills covered with jungle come down to the river bank. Occasionally a small fort is passed and the steamer made some stops to take in or put down passengers. At Yenbay I was most hospitably entertained by the Colonel in command, who had formerly been A.D.C. to the Governor of Pondicherry and had travelled about India a good deal.

Leaving again the next day on a much larger stern-wheeler, the "Yün-nan," we reached Hanoi in 12 hours, including a stoppage of an hour when the steamer ran ashore on a sandbank. These river steamers are worked entirely by Tong-kingese, with a French purser to look after the passengers.

Hanoi, the capital of Tong-king, is a town of about 100,000 inhabitants with good broad streets and French built houses, a large hotel and a fair number of French shops. One sees very few carriages; everyone uses rickshaws.

The next evening we left for Haiphong. The steamers between Hanoi and Haiphong run by night and get through the journey down stream in 12 hours. They are very comfortable and have regular cabins which the upper river boats do not possess.

Arrived at Haiphong I was lucky enough to find a ship leaving the next day for Hong Kong. She was flying the tricolor, and when I went on board to ask what time she started, I naturally addressed the captain in French. The captain stared at the mate, and the mate stared at the captain: they evidently did not understand a word I said. This did not surprise me, so I was going to have another try, when one of them said, "Can't you speak English? We don't understand any French here." The captain it turned out was a Norwegian, and the two mates were both English. The only Frenchman on the ship was one of the engineers.

This state of things is rather characteristic of a French colony. It seems most difficult to get the right class of man to emigrate. The large number of officials that are

sent out to administer Tong-king is a standing joke among the military and non-official part of the population. Doubtless some of these are able and energetic men, but from all accounts they do not all answer to this description.

Commercial men, too, do not seem very keen on coming out to French colonies, and the heavy duties levied do not tend to make trade here a very paying business. Haiphong is the principal commercial town of Tong-king, but the greater part of the business is done by two German firms. The imports consist largely of British goods transhipped from Hong Kong, and a great deal of Bombay yarn is thus brought through Tong-king into Yün-nan. The population of Haiphong is said to be 20,000, of which some 5000 are Chinamen.

Tong-king reminds one very much of Burma. The lower part, the delta of the Red River, is a large rice plain, with some higher-lying ground rising out of it. Further up the river the country becomes hilly and forest-clad. Financially the colony does not seem to have been a success. For many years a large annual grant had to be obtained from the French Government to keep things going. It was not till the arrival of M. Doumer as Governor-General in 1898 that Tong-king was able to pay its own way[1].

Leaving Haiphong on the evening of the 3rd June, we reached Hong Kong on the morning of the 7th. The actual time taken in this voyage was only 48 hours, but we called at Hoi-hou, in the island of Hai-nan, and were delayed here some time taking in a large cargo of pigs and chickens.

From Hong Kong I took the P. and O. for Marseilles, my Indian and Chinese followers leaving the ship at Singapore and returning thence to Rangoon.

[1] The colony has, I believe, progressed much since the time of my visit.

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CHAPTER XXV

MYITKYINA TO T'ÊNG-YÜEH *VIÂ* SIMA.

Our work of the previous year—Necessity for further explorations—Watts-Jones and Ker go to Ssŭ-ch'uan—Project of reaching Assam from China—Ryder's route—My route—Manifold's route—By rail to Myitkyina—Cross the Irrawaddy—The Nantabet—Bad ferries in Burma—The fort of Sima—Cross the frontier—A picturesque but inconvenient bridge—My followers—Our Gurkhas—The first Chinese village—Chan-ta—The sawbwa's fate—Three different accounts of it—Kan-ai—T'êng-yüeh—Mr Jamieson.

In our expedition of 1898–99 we had surveyed a considerable area of country and had examined a line for a railway from Burma to the Yangtze. But there still remained much work to be done.

In the first place it was not yet certain that the line we had reconnoitred was the best that could be found. There was still a possibility that the Chien-ch'ang valley[1] route might turn out to be an improvement on it, and it was therefore very essential to make a more thorough exploration of this part of the country than we had been able to do the previous year.

Besides this, Yün-nan is a large province, and though among us we had covered some thousands of miles of road, there still remained large districts about whose commercial and mining resources it would be useful to gain information. It was not therefore difficult to plan out journeys for another season, though some care and consideration was necessary to arrange our routes so as not to go over trodden ground.

Our party was not to be such a large one as that of the year before. Captain Watts-Jones and Mr Ker were both sent to Ssŭ-ch'uan this year to survey lines from the Yangtze to Ch'êng-tu, the capital of that province. But Ker was also to explore the eastern approach to the Chien-ch'ang valley route by following the road from Chia-ting Fu

[1] Lat. 27° to 28° 30′, long. 102° 15′.

(lat. 29° 35′, long. 103° 45′) up the T'ung River valley. Captain Ryder was, however, very keen on another year's exploring in Yün-nan, and he and I were able to make our plans for seeing as much new country as possible.

I had for some time entertained an idea of trying to find a way across from China to Assam, near the sources of the Irrawaddy, a region very imperfectly explored, as Prince Henri d'Orléans's route lay to the south of it and that of A. K., the Indian surveyor, further to the north. The end of our explorations in Yün-nan seemed a good opportunity for putting this project into execution, and it was with this idea that Ryder and I arranged that in April, when our travels in Yün-nan were finished, we should meet at A-tun-tzŭ[1], a town in the extreme north-west corner of the province (lat. 28° 30′, long. 98° 55′). Here we were to be joined by Major C. C. Manifold, of the Indian Medical Service, with whom I had been in communication on this subject for some time.

Our plans for the five months' work that first lay before us in Yün-nan and western Ssŭ-ch'uan were roughly as follows.

Ryder was to travel from T'êng-yüeh north-east to Yün-lung Chou; thence, avoiding previously surveyed routes, he was to make his way to Yün-nan Fu. From there he was to make a circuit to the south, visiting several important towns that we had not been able to see the year before, and to meet me at Yi-men Hsien, which lies three days south-west from the capital. After this he was to go westward to Ch'u-hsiung (lat. 25°, long. 101° 35′), and then turning north-east to find a way across to Tung-ch'uan Fu (lat. 26° 25′, long. 103° 10′) and on to Chao-t'ung Fu (lat. 27° 20′, long. 103° 40′). From there again turning west he was to find a fairly straight line to A-tun-tzŭ.

Myself, I was to survey the road from T'êng-yüeh to Lung-ling T'ing (lat. 24° 35′, long. 98° 40′), and from there find as straight a route as possible to Yün Chou (lat. 24° 30′, long. 100° 10′). Thence south-east to Wei-yüan, and, avoiding the direct P'u-erh road which I had traversed in 1895, strike off east to Hsin-fu (lat. 23° 40′, long. 101° 10′)

[1] Often spelt Atentze.

on the Black River, and so down to P'u-erh (lat. 23° 5′, long. 101° 5′). From here up through T'a-lang, Hsin-p'ing (lat. 24° 5′, long. 102°), and Yi-mên to Yün-nan Fu. Starting again from the capital, my route was to lie northwards to survey the Chien-ch'ang valley and meet Ker at Yuëh-hsi T'ing (lat. 28° 40′, long. 102° 35′). From here I was to find as direct a road as possible westward to A-tun-tzŭ.

Our routes besides being mapped out so as to avoid as much as possible all country already surveyed, were also arranged so as to complete the longitudes by telegraph that Ryder had begun last year. He had then fixed T'êng-yüeh, Yung-ch'ang, Ta-li, and Ch'u-hsiung, but had not been able to get Yün-nan Fu. We were able this year to manage that Ryder should be at Yün-nan Fu while I was at P'u-êrh, and again that he should be at Ch'u-hsiung while I was at Yün-nan Fu. We were thus able to fix the position of both Yün-nan Fu and P'u-êrh Fu. Both results came out very satisfactorily, so that maps of Yün-nan can now be constructed on a much more secure basis than before.

Manifold was not able to start till very late in the season, and came nearly straight up from Burma to A-tun-tzŭ, getting in, however, a good deal of new country on his way up. His route lay from Yung-ch'ang Fu northwards to Yün-lung Chou, and thence north-east till he struck the Yangtze at Shih-ku (lat. 26° 50′, long. 99° 55′). From there he was to follow up Gill's route northward, but as it turned out he found this blocked by snow, and had to get to A-tun-tzŭ by the valley of the Mekong.

Leaving London in October, 1899, I reached Rangoon early in the following month and went up to Myitkyina by train, the railway having been opened in March of that year. Ryder, being unable to get mules at Myitkyina, had to start from Bhamo.

I had already been in by the main Bhamo route and by the Sadon route, so I determined this time to see new country by taking the road through Sima to Chan-ta[1]. The actual start has to be made from Waingmaw, a village on the left bank of the Irrawaddy, two miles below Myitkyina, and the process of getting baggage across by

[1] San-ta in Shan.

miserable little dug-outs was a long one, as the river is a good 500 yards wide.

On the 15th November I was able to make a start from Waingmaw. There is first 21 miles of level road over a grassy plain, almost uninhabited, to Kazu, a military police post near the foot of the hills. The crossing of the Nantabet River, 300 yards wide, caused considerable delay, as at the ferry there was only one small dug-out, not capable of taking more than three mule-loads at a time. The arrangements for crossing rivers in British territory, both in Burma and in the Shan States, compare very unfavourably with the excellent bridges and ferries one finds in China.

Two more short but hilly marches brought us to Sima, which is our frontier fort and is garrisoned by military police. The buildings, which were of the very inflammable split bamboo and thatch, were just about to be replaced by stone houses. I was hospitably entertained here by Mr Barnard, the civil officer of this part of the Kachin Hills, who was the only British officer in Sima at the moment.

Continuing our march the next day we crossed the Paknoi Hka[1], a stream which here forms the boundary between Burma and China. It is only 15 to 20 yards wide, but is full of rocks and has such a tremendous current that it is not fordable at this time of year. We had to cross by a picturesque but very shaky bamboo bridge, too narrow for loaded mules to pass, so that everything had to be taken off, and mules and loads brought across separately. We made our first camp in China about a mile beyond the Kachin village of Shirawkawng.

I had with me this year the same surveyor, Lachman Jadu, and the same interpreter, Huang-hsin-chai, as last year. It had also been arranged that Ryder, Manifold, and I should each bring with us two or three Gurkha sepoys, so that we should be able to defend ourselves if necessary in the wild country we might have to pass through in the last stage of our intended journey. These men were obtained through the Government of India from the military police

[1] *Hka* means a stream or river in the Kachin language.

Corner of Sima Fort

Photos by Major H. R. Davies

Bridge over the Paknoi Hka

battalion at Myitkyina, and very useful indeed they proved, especially in the Tibetan part of our journey.

Two of these, Naik Seowlal Thapa and Doba Ram, accompanied me, and our party was completed by my Madrassi cook, a Chinese mule man promoted to be servant, and the surveyor's Khalassi cook. For our baggage we had 16 mules with Chinese drivers.

On the 20th November, we reached Mêng-lung, a village of hill Chinamen, the first Chinese we had come across, the inhabitants so far being all Kachins. As usual on this frontier range the night was a cold one, the thermometer falling to 21°. The next day we crossed the Irrawaddy-Taping watershed at a low place at 6,500 feet, and descended gradually to the Chan-ta plain. We slept at the village of Ho-pyek, as the road does not pass through the capital of the state.

Moreover a visit at this moment to the town of Chan-ta would not have been very opportune, as the sawbwa, my host of last year, had lately had his head cut off by the Chinese authorities.

The story as told me at Ho-pyek is as follows:—In the summer of 1899 a person appeared pretending to be the nephew of the sawbwa and the rightful heir to the throne. Possibly because they wished to get rid of the sawbwa, who had not a very good reputation, the Chinese officials at T'êng-yüeh took the part of the pretender. They marched some Chinese soldiers down to Chan-ta, and the sawbwa fled to the hills, where the Kachins received him and prepared to resist the Chinese. The officer in command, being apparently more of a diplomat than a warrior, did not like the idea of attacking Kachin stockades. He invited the sawbwa to come back to his capital, and said that in order to settle things in a friendly way they would lay the matter before a meeting of Shan sawbwas. The sawbwa was foolish enough to come in, and of course had his head cut off. The supposed nephew then reigned in his stead, but the Chinese soon afterwards found out that he was an impostor, and decapitated him too.

Now this sounded quite a circumstantial and probable story, but the next day, only a few miles off, I was to hear an equally circumstantial but absolutely different version of

the affair. Here they told me that a relation of the Chinese general at T'êng-yüeh asked the sawbwa to lend him some money, the loan being no doubt intended for the general himself. The sawbwa said he had no money to spare, and refused. A little while afterwards the general's relative or someone sent by him tried to break into the sawbwa's house and steal the money he wanted, but the thief was caught in the act and shot. Soon afterwards the general invited the sawbwa to go up to T'êng-yüeh, and asked him to dine with him. After dinner he had his head cut off.

A few days afterwards we heard from Mr Jamieson, the Consul at T'êng-yüeh, the Chinese official version of the case. This was that the sawbwa had been guilty of a series of crimes culminating with the murder of his old Chinese clerk. The T'êng-yüeh authorities therefore tried him, condemned him to death, and executed him.

Which of these three stories is the true one I will not venture to guess—probably none of them. The sawbwa had not a good reputation and possibly deserved his fate. But among the Shans whom I spoke to there was evidently a feeling that an injustice had been done, and the sawbwa's wife had gone down to Rangoon en route for Peking to complain to the emperor.

On the 22nd I meant to get to the new town of Kan-ai (Möng Na), where I was to meet Ryder, but being much delayed by taking a short cut which turned out a very bad road, and by crossing the Taping by ferry, we did not reach the Nam Ti till nightfall and then found this river unfordable. It was too dark and too late to look for a boat, so I had to return a mile or two and sleep in a Shan monastery, where the worthy monks were all hard at work smoking opium! Strict Buddhism does certainly not thrive in places which have come at all under Chinese influence.

The next morning I found Ryder in Chiu-ch'êng, the old town of Kan-ai. He had also been delayed by bad roads and had been able to get no further than this. So, as we heard that the road from the new town up the right bank of the Nam Ti was very bad for mules, we decided to stick to our last year's route. Three marches brought us to T'êng-yüeh on the 25th November.

Here we found Mr Jamieson, who had been appointed

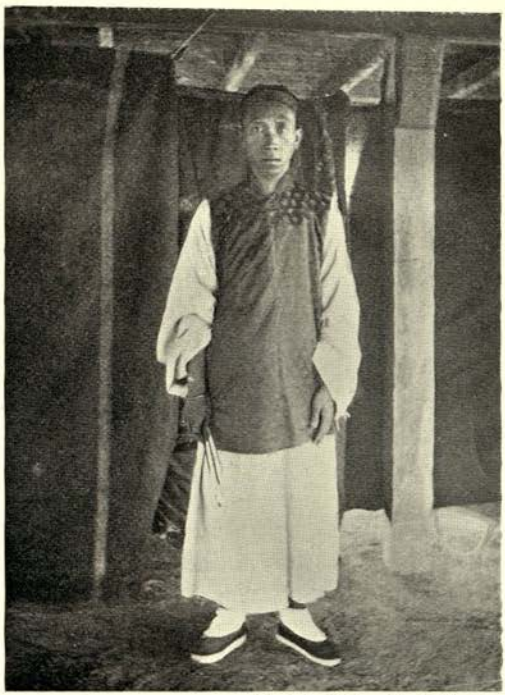


Photo by Major H. R. Davies

The sawbwa of Chan-ta (San-ta)

British Consul since our last visit to this town, and we spent most of our time with him. We found the people very quiet and friendly—a great contrast to the unpleasant reception we had met with the year before. Mr Jamieson had a little trouble when he first arrived, but soon established friendly relations. At the time of our visit he was just on the point of leaving to take up the appointment of Commercial Attaché in China. Unfortunately his place at T'êng-yüeh was not filled for some time, and Major Manifold, passing through here a few months later, experienced a very hostile reception[1].

Now however a British Consul and an officer of the Imperial Maritime Customs have been established here for some years.

[1] See p. 255.

CHAPTER XXVI

T'ÊNG-YÜEH TO P'U-ÊRH.

Ryder starts for Yün-lung Chou—I start for Lung-ling T'ing—A charitable Buddhist monk—A hilly journey to the Shweli—Man-lo ferry—Am taken for Jamieson—Lung-ling—A direct route to Yün Chou—The Salween valley—Precipitous hills—P'an-chih-hua ferry—Lo-los—Yao-kuan again—A Mahommedan fort—The Yung-ch'ang River at Wan-tien—A Shan plain—Buckwheat—A hare—Ta-mêng-t'ung—Strike into our route of the year before—Yün Chou—Objections to my leaving the main road—Stories of rebellion—The Mêng-ma valley—A former Shan state—The Mekong at Ka-li ferry—The salt trade—The salt wells of Yün-nan—A retired highway man in charge of the district—A Mahommedan traitor—The Ching-ku valley—Tea growing—A woodcock—Deep sandstone chasms—Wei-yüan—Up the Wei-yüan River—A salt well—My drunken cook—An abominable road—The K'a-tu tribe—Hsin-fu—The Black River valley—Christmas with a coffin—Unpleasant climate—An uninteresting country—The Mo-hei salt wells—P'u-êrh—Difficulties of longitude by telegraph—Our final success—The treaty port of Ssŭ-mao—Mr Cary's invitation.

On the 27th November we set out again. Ryder took the road north-east to Yün-lung Chou, while I went south-east towards Lung-ling T'ing.

I did not take the direct road to that place, as this had been already surveyed by Captain H. B. Walker of the Duke of Cornwall's Light Infantry the year before. To avoid known country I therefore retraced my steps to Nang-sung-kuan, our last camp before marching into T'êng-yüeh, and struck across eastward from there.

The first day out of Nang-sung-kuan proved an uphill march, and I got no further than the little hill monastery of Chai-t'ang, inhabited by a white-bearded Buddhist priest. These monks, who live in the mountains far from any village, are very superior men to the ordinary priest of the village temple, and give themselves up to small works of charity, such as giving food or straw sandals to travellers.

In the morning, while still in the Nam Ti valley, I got a shot at some coolan (*grus cinerea*) and killed two with

Photo by Captain W. A. Watts-Jones

The Nan-tien plain

one shot from my .303. A lucky shot and the game was very welcome as a relief to perpetual chicken. The breast of this bird cooked like a beefsteak is excellent.

Three more days of hilly going brought us to Lung-ling. The Shweli is crossed by raft at Man-lo ferry, some eight miles short of the town. The Shweli valley here and the hills round it are principally inhabited by Chinamen, but there are a few scattered Shan villages and even some Las. The country was formerly Shan, and many of the villages retain their original Shan names.

At the river I met several officials on their way to settle the position of a new iron chain suspension bridge which they proposed building near here. One of these mandarins had been out with the Boundary Commission last year, and had learnt the accomplishment of shaking hands, a feat which he performed with right or left hand indifferently. He appeared overjoyed to see me, rather to my surprise, as I could not recollect ever having met him before. But it turned out after a little conversation that he had taken me for Jamieson. I do not think there is any resemblance between us, but I suppose all Europeans look much the same to Chinese eyes.

Lung-ling stands at a height of 5,200 feet and appears to contain about 800 houses, but the plain it stands in does not measure more than a square mile in extent. It is a poor place compared to T'êng-yüeh, and derives most of its prosperity from trade with Mang-shih (Möng Hkwan), Nam-hkam and other Shan states.

From here I purposed striking east by as direct a route as possible to Yün Chou. Mr H. L. Scott, of the Yün-nan Company, had the previous year taken what is considered the main road between these two places, *viâ* La-mêng ferry and Shih-tien ; but this makes a considerable circuit to the north. I had heard of another ferry called P'an-chih-hua crossing the Salween lower down, and I determined to make for this place.

An easy march on the 2nd December took us to Mêng-mao, a small Chinese plain of four or five villages, where they make a little coarse paper and weave mats out of rushes. This place must not be confused with the big Mêng-mao on the Shweli, the Möng Mow of the Shans.

The next day we crossed the Shweli-Salween watershed at 8,700 feet. The range is not so high here as it becomes north of the T'êng-yüeh-Ta-li road, where its peaks rise to 12,000 feet or more.

Sleeping at Pai-ta, which stands on a sort of little terrace in the hillside overlooking the Salween, we descended the next morning by an exceedingly steep path to what is often known as the P'an-chih-hua ferry. It should be more correctly called Chuan-shui, as the real P'an-chih-hua is a mile or two lower down and is now disused as a ferry.

The Salween here runs between hills which are not quite precipitous, but are so steep that one may say that the river banks are 3000 feet high. No goat track could possibly go straight up them. They are ascended by steep zigzag paths. The river is here at an elevation of 2,100 feet, and the highest peak on the range to the west of it, though only 6½ miles off in a straight line, is 10,100 feet. The ferry is not on any main road, so there was only one somewhat water-logged raft, and the crossing of 140 yards of deep swift-flowing water was a matter of time.

We slept at Ma-lu-t'ang, a village which with four others in the neighbourhood is inhabited by Lo-los, who still use their own language, but have in other respects adopted Chinese customs, even to the extent of their women binding their feet. The few people who exist in this part of the Salween valley get a living principally by growing tobacco and opium.

On the 5th we reached the large village of Yao-kuan, where I had slept a night in the previous year on my way from Yung-ch'ang down to Kun-long. I found the inhabitants just as inquisitive and ill-mannered as they had been on my former visit. In one of the little plains passed through on this march we found the ruins of a Mahommedan fort, built during the rebellion of 1854–1873. They say the rebels held out here for three or four years, and what remains of the fort is most solidly built of large blocks of stone.

Our next march was chiefly downhill, leading us into the valley of the Yung-ch'ang River, where it runs through the little plain which the Chinese call Wan-tien and the

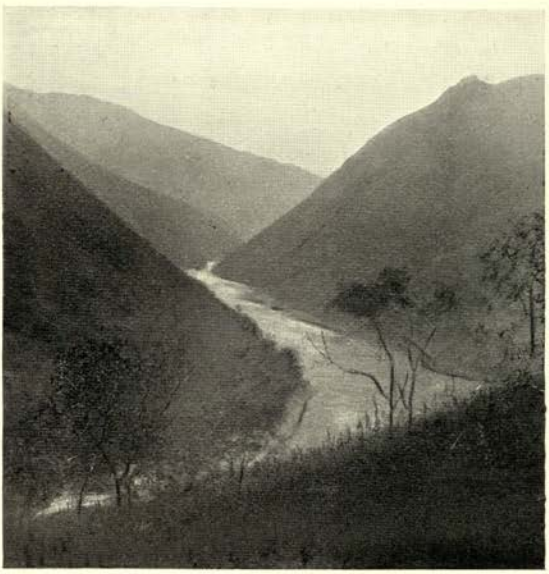


Photo by Major H. R. Davies

The Salween at Chuan-shui ferry

Shans Möng Ya. As the elevation here is only 2,400 feet, the latter race have been allowed to retain undisturbed possession. They form part of the Shan state of Ta-mêng-t'ung or Möng Htong.

The next day we crossed the river. It is here 50 or 60 yards wide and was three feet deep, with a strong enough current to make the ford difficult. There is no boat or raft in the whole plain, so that if a traveller happens to arrive immediately after heavy rain, he has to wait till the water goes down again. In the rainy season it must usually be impassable. The Shans are not as good as the Chinese in their arrangements for crossing rivers.

Climbing a big jungle-covered range we took two days from here to reach Ta-mêng-t'ung, the capital of the state. There are many cultivated clearings in the forest, and the chief thing grown is buckwheat, a beautiful crop at this time of year, making large red patches over the hillsides. A notable event on the day we left Wan-tien was the putting up of a hare in the jungle. This is the only time I can remember having seen one in Yün-nan, though they are common in the Tibetan part of Ssŭ-ch'uan.

The plain of Ta-mêng-t'ung is not a large one, and as it is not much under 4000 feet high there are some Chinese families settled here, though the majority of the inhabitants are Shan. The sawbwa, who was then only twelve years old, lives a little to the north of the main road, so we put up in the old town which lay on our route.

From here the main road to Yün Chou lies through Shun-ning, but I wanted to find a more direct route, so struck out E.S.E., and, after an uphill march, camped in the little Lo-lo village of Li-pa-sa at 6,200 feet.

The next day the road took an unexpected turn to the south and joined into the route by which Ker and I had come up from Chên-k'ang the year before. I had therefore to follow this road into Yün Chou, arriving there on the 11th December. I put up in a large temple, and we had a day's halt to rest mules and men. Some of the animals were in bad condition when we started, and two of them were by this time unfit to carry loads. Luckily prices are not high in western China, and I had only to pay £4. 12*s.* and £3 for the two ponies I bought to take their places.

I found at Yün Chou the same mandarin whom I had met there the year before. He was very civil and friendly, but, like all Chinese officials, he wants the traveller to go on by a main road to the nearest town, so as to get rid as quickly as possible of the responsibility of having a foreigner in his district.

Now the road from here to Wei-yüan which I proposed to follow can by no means be considered as a *ta lu* or big road, so my ideas did not at all meet with the mandarin's approval. Accordingly in the evening he sent a message to my interpreter to say he would like to see him, and gravely informed him that there was a rebellion going on in Mêng-ma, a place I should have to pass through. Of course I knew this was pure fiction, and I sent an answer to say that if on nearing Mêng-ma I found anything going on I would take some other road. After this there were no more objections, and we left Yün Chou the next morning, climbing very steeply more than 3000 feet up a grass-covered range.

The following day we descended into the Mêng-ma valley, which we followed down for a day and a half. The width of cultivation only averages about 100 yards on either side of the little river which waters it. The hills on both sides are covered with scrub jungle, which runs down to the edge of the fields, and the river in the middle is lined with willow and other small trees. Along the foot of the hills are scattered at intervals little villages, each surrounded in the Shan fashion with its clump of cultivated bamboos. The Mêng-ma valley strikes one as being rather pretty at first, but its monotony begins to pall after a time.

Mêng-ma was formerly a Shan state, but is now administered directly by the Yün Chou mandarin. The representative of the sawbwa's family, with a few Shan households, still lives in the principal village, but he has now little power. In fact the Shans have been entirely absorbed by the Chinese, and the Shan language and other signs of Shan nationality have practically died out.

Turning out of this valley we crossed another range of hills, and on the 17th December, the fifth day out of Yün Chou, crossed the Mekong at Ka-li ferry. The river here has a strong current and is a little more than 100 yards

wide, but the crossing did not take long, as the large punt-shaped boat would carry 10 mules at a time.

This ferry is a good deal used, as nearly all the salt for the Shun-ning and Yün Chou districts comes across here from the wells of Wei-yüan and Chên-yüan. I asked the salt depôt man at the ferry how much salt crossed this ferry in a year. With the usual readiness of a Chinaman he promptly replied, "300,000 mule-loads." "But this would make 800 loads a day all the year round," I ventured to suggest. And as there is no traffic in the rains, he had to acknowledge that he might have slightly over-estimated. From what I saw myself on the road I should think 8000 or 9000 mule-loads a year would be a fair estimate.

Salt is a very important article of trade in Yün-nan, as it is a Government monopoly, and none is allowed to be brought into the province from abroad. There are three parts of Yün-nan where salt is obtained. These are (1) Yün-lung Chou, which supplies north-western and a good deal of western Yün-nan, including T'êng-yüeh, Yung-ch'ang, and Ta-li; (2) Wei-yüan, Chên-yüan, and Ching-tung districts and Mo-hei, near P'u-êrh: these wells supply southern and south-eastern Yün-nan; (3) the country north of Ch'u-hsiung Fu: from here is supplied the northern part of the centre of the province, including the capital. The north-eastern corner of Yün-nan, including Tung-ch'uan and Chao-t'ung obtains its salt from Ssŭ-ch'uan province. It is always officially laid down for each district where it is to get its salt from, and none is allowed to be brought from elsewhere.

After crossing the ferry we followed the river down for a little way and then climbed up to the village of T'uan-shan to sleep. We were now in the district of Ching-tung T'ing, but the bit of country round the ferry is in charge of a retired highway robber. A Mahommedan by religion, he naturally sided with his own people in the Panthay rebellion, but towards the end, being a prudent and far-seeing man, he recognised how things were going, and went over to the Chinese side. So zealous did he show himself in the slaying of his former brothers in arms, that the Chinese Government rewarded him by granting him official rank and a small piece of country to rule. Such instances

of treachery on the Mahommedan side were very common all through the rebellion.

After an uphill march on the 18th through jungle and fir woods to the pleasant little hill village of Pai-yin-ch'in, we descended the next day to the Ching-ku Ho, which here runs through a curious valley, so much cut up by wooded spurs and deep sandstone ravines that it can hardly be called a plain. There is scarcely any flat ground, but there are a good many villages scattered along the valley, and the side streams are lined with terraced fields. The country reminds one very much of the upper part of the Shweli River.

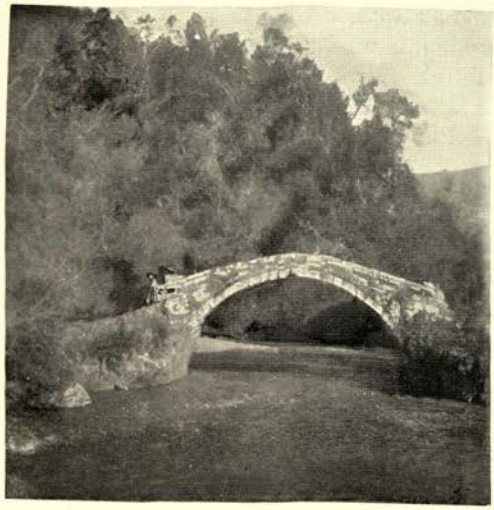
There is a certain amount of tea grown on the hillsides here, at heights between 4,500 and 5,500 feet in a sandstone soil. It is not considered so good as that produced in the Shan state of Keng Hung, the famous P'u-êrh tea.

I shot a woodcock on the march which brought us into the Ching-ku valley. I have occasionally seen this bird in different parts of Yün-nan, and have met with it in May in the Tibetan part of Ssŭ-ch'uan.

Our route for the next day and a half still lay down the Ching-ku Ho, but the country is so broken by steep spurs running down to the river, that there is little actual flat going. The river is twice crossed. The first crossing is by a wooden bridge where the stream, though not 20 yards wide, runs in a tremendous chasm between cliffs 200 feet high. These extraordinarily deep ravines are characteristic of this valley.

We reached Wei-yüan on the 21st December, and I found the place in no way changed since my previous visit. From Wei-yüan to P'u-êrh is only four or five marches by the direct road, but I had been along this route in 1895. I therefore struck off in an easterly direction for Hsin-fu, a place near which Turner and Ker had come in to the P'u-êrh-Ta-li road in the previous season. From there by turning south to P'u-êrh I should be able to get in the only part of this important road that had not been surveyed by our parties.

Our route led northward for a day and a half up the Wei-yüan Chiang, along the road to Chên-yüan T'ing, which had been followed by Captain Wingate in 1895. The



A bridge in the Mêng-ma valley

Photos by Major H. R. Davies

The Ching-ku Ho

inhabitants of the valley are chiefly Shans. In the first march we passed two of the salt wells. One of these called Hsi-k'ung-ching I stopped to examine. The water is drawn up in a large skin bucket from the well, which they say is 180 feet deep. It is then boiled in enormous cauldrons for three or four days till a residuum of earth strongly impregnated with salt is left. This is then pounded, mixed with water and boiled afresh over and over again till nothing but pure salt remains. The well is said to produce 500 lbs. of salt in the year. They do not work it in the rains, as they say the water is not then salt enough. I suppose the amount of rain water which falls into the well and filters through the earth into it dilutes the original salt water so much that it is not worth boiling.

Strong liquor is apparently sold cheap at Hsi-k'ung-ching, for soon after we had got to our halting place for the night I got a message to say that my Madrassi cook was lying on the road and could not be got on. So dead drunk was he that he could not move for hours and did not turn up till the middle of the night. He appeared the next morning with a bland face as if nothing particular had happened, and afterwards explained that a bad attack of fever had prevented him from arriving in camp as soon as he could have wished.

Indian servants are the greatest possible nuisance in China, as of course they are quite unable to talk to anyone or to buy anything. Their only use is that they attract a good deal of attention, and take part of the crowd of sightseers away from oneself. In Burma it is impossible to get a Chinese cook. Travellers entering western China from the Yangtze direction have the great advantage of coming with Chinese servants.

On the second day out of Wei-yüan we left the Chên-yüan road and, fording the river, turned eastward. The road was abominable, leading up the actual bed of a stream covered with large stones, and crossing the stream more than 30 times in less than six miles. We slept at Têng-t'ung, a village inhabited by the K'a-tu tribe, who are called Wo-ni by the Chinese. Their language is closely allied to the different Lo-lo dialects, and the headquarters of the tribe is in the T'a-lang district.

The next day, the 24th, we crossed the watershed between the Mekong and the Black River at 7,500 feet, and on Christmas Day reached Hsin-fu. The village contains only 30 houses, and is built on the Pa-pien Ho, a river 50 yards wide, which is the upper part of the Black River of Tong-king.

The height of Hsin-fu is only 3,400 feet, and the whole of this part of the Black River valley has a bad reputation for unhealthiness. The Hsün-chien, the small official who is in charge of the district, had just died and was in his coffin in the room of the temple I was sleeping in, awaiting removal to his native place for burial.

Certainly I did not find the Black River valley a pleasant climate even at this time of year. At night the thermometer would go down to 40°, and there would be a nasty cold mist till the sun broke through about ten o'clock, when it would become decidedly hot. But in justice to this valley I should mention that Turner and Ker were travelling in it for some days in the height of the rainy season, and that none of their party, which included several Chinamen, suffered at all from fever. So healthy are the great part of the uplands of Yün-nan, that the Chinese of that province are apt to condemn as unfit to live in any place where it is possible to get fever.

For two days from Hsin-fu we followed down the Pa-pien valley, but keeping generally some way off the actual river. An uninteresting country, very thinly populated by Chinese and K'a-tus. Later on in March and April there is a good deal of traffic in P'u-êrh tea along this road, but at this time of year there is no trade except in salt carried by men on foot from Mo-hei, near P'u-êrh.

Leaving the Pa-pien valley altogether on the 28th, we turned more westward and the next day reached Mo-hei, a large village with an important salt well which supplies a very large part of southern Yün-nan.

Here our route joined the main road from Yün-nan Fu to P'u-êrh Fu, and the next day, crossing a range at just over 6000 feet, we dropped down into the P'u-êrh plain.

The only apparent change in P'u-êrh since I was there five years before was the establishment of a telegraph office. In the evening I spent several hours at the office

trying to get the longitude from Ryder who had arrived at Yün-nan Fu, but the current proved to be not strong enough for direct communication between the two places. We tried again the next night, but with the same unsatisfactory result. On the third day I was just starting for T'a-lang in hopes that we might at all events fix that place, when I got a telegram from Ryder asking me to have one more try from P'u-êrh.

Happily we were successful on this occasion, and the result of our observations subsequently worked out well, so that we were able to celebrate New Year's Day of 1900 by fixing the position of P'u-êrh. It was fortunate indeed that Ryder's telegram reached me in time, for the very next day the line was broken, and when I got to T'a-lang a few days later I found communication with Yün-nan Fu still interrupted.

Since I was last in this part of the country five years before, Ssŭ-mao had been opened to foreign trade as a "treaty port," and English and French Consuls and some of the officials of the Chinese Imperial Maritime Customs were now established there.

Mr Carey, the acting British Consul, kindly telegraphed to me asking me to go down there for a few days. A very tempting invitation, but I had regretfully to decline. My work was mapped out for the next few months and I could not spare the time.

CHAPTER XXVII

FROM P'U-ÊRH FU TO YÜN-NAN FU.

Leave P'u-êrh—Cross the Black River—A shaky iron chain bridge—T'ung-kuan—A slippery descent—The A-mei Chiang—T'a-lang-T'ing—Gold mine—The Wo-ni race—The K'a-tu, Pu-tu, and Pi-o tribes—Their dress—A Lo-lo village—The Red River—Mo-sha—Shan women's costume—Non-Buddhist Shans—Flat-roofed houses—A steep climb—Perpetual mist—Hsin-p'ing Hsien—Curiosity of the population—Streets lined and roofs crowded—Lo-lo origin—Opium and sugar-cane—Good oranges—A dry country—Iron mine—Yi-mên Hsien—Meet Ryder—A plateau country—An-ning Chou—Duck shooting—Across the Yün-nan Fu lake—Reach Yün-nan Fu—The French in the capital—Attack on them by the Chinese—The English missionaries—Observations for longitude.

On the 2nd January, 1900, we left P'u-êrh for the capital of the province. Our first day took us back along the road by which we had come to Mo-hei. Our second march was somewhat more varied, for crossing a range at 6000 feet we descended to our old friend the Black River or Pa-pien Chiang. It is crossed by a very shaky iron chain bridge, which sways about so much that only three mules can pass over at a time with safety. The stream is here from 50 to 80 yards wide. Its strong current and occasional rapids make navigation impossible.

On the third day we reached T'ung-kuan, a big village pleasantly situated on a plateau with small jungle-covered hills rising out of it. The population about here is very mixed, including Lo-los, K'a-tus, Ma-heis, and a few Shans. The Chinese are decidedly in a minority, and perhaps it is due to this happy circumstance that the natives of T'ung-kuan have better manners than one usually finds in China.

A thunderstorm the next morning made it unpleasantly slippery along the steep downhill road which brought us to the A-mei Chiang, another source of the Black River and

much the same size as the Pa-pien Chiang. The elevation of this river here is only 2,600 feet, and it is spanned by another chain bridge in the same shaky condition as that we had crossed two days before.

Sleeping at Chang-lu-p'ing we had a climb of 2,600 feet the next morning, and then a descent to the little narrow plain in which T'a-lang T'ing is built. The town appears to contain 500 houses or so, and has I think better shops than P'u-êrh. Its principal importance is derived from its gold mine, which lies some miles off the town. I did not visit it, as it had been examined in the previous year by Turner and Ker.

The villagers in this plain belong chiefly to the Wo-ni race, who are divided into three tribes, the K'a-tu, Pu-tu, and Pi-o. These all speak Lo-lo dialects closely allied to each other, but they have not the straight features and fine physique which are characteristic of the genuine Lo-lo. M. Bons d'Anty, of the French Consular Service, who is an authority on Lo-los, considers these tribes to be the original owners of the soil and to have been conquered by the Lo-los, who have imposed their own language upon them. If this is so, it seems probable that they belonged originally to the Mon-Annam race, and are connected with the P'u-mans and the Las and Was.

We met many Pu-tu and Pi-o families returning from the town. The dress of their women is picturesque. The dark coat reaching nearly to the knees is open in front, with a separate piece of cloth fastened across the breasts. In the arrangement of this piece of cloth lies a distinction between two of the tribes, for in the case of the Pu-tu it is buttoned on to the coat, while among the Pi-o it is simply fastened round inside the coat. The skirt of both tribes consists of one piece of stuff put on round the waist and just tucked in to fasten it. The turban has a long piece of spare cloth which is thrown back from the front over the top of the head. Their ornaments are large silver earrings. The colour of their coats and waistcloths forms another distinguishing tribal mark, for those of the Pi-o women are often white, those of the Pu-tu always dark blue. The young unmarried girls of both tribes wear blue caps instead of turbans, and their hair is cut to a length

of about a foot, hanging down over their necks just after the fashion of the Kachin girls of the Burmese frontier. The K'a-tu women are distinguished from the other two tribes by wearing trousers, and by little metal ornaments which hang down from the front of their turbans. These three tribes are known to the Chinese by the name of Wo-ni.

From T'a-lang the main road to the capital crosses the Red River at Yuän-chiang Chou and passes through Hsi-o and Hsin-hsing, but this route had been taken by Turner and Ker the previous year. To avoid known ground I took a road through Hsin-p'ing Hsien to Yi-mên-Hsien, passing through a piece of country quite blank on the maps.

Our route led us in a northerly direction over the usual mountainous country, and on the second day we crossed the watershed of the Black River and Red River at 7,500 feet. Our camp that night was at Ma-lu-t'ang, a village inhabited by genuine Lo-los, not Wo-nis. They say they migrated here from the Ch'u-hsiung-Fu district three generations ago. Besides Lo-los there are Wo-nis in this part of the country, and also two other tribes, K'u-tsung[1] and Lo-pi, of whom I have never heard in other districts. I believe them to be connected with the Wo-ni race.

We had been experiencing quite warm weather lately, and this hot climate seems to be a peculiarity of the Black River basin, for the morning at Ma-lu-t'ang, which lies on the Red River side of the watershed, was cold and frosty. In two more days we reached the Red River at Mo-sha. It is from 70 to 100 yards wide, flowing through bare reddish coloured hills, but just here passing through a plain four miles wide.

This Mo-sha plain is at a level of only 1,650 feet, the lowest I have ever been in Yün-nan, except on the very borders of Burma or Tong-king. It is inhabited by Shans, who have however no sawbwa of their own. The women have a very peculiar dress, quite different to that of any Shans I have seen elsewhere. Their blue jackets have red cuffs, and they wear a red band of cloth round the waist. Both jacket and petticoat are much ornamented round the

[1] Not to be confused with Ku-tsung, a name the Chinese of Yün-nan apply to Tibetans.

Iron-chain bridge over the A-mei Chiang

Photos by Major H. R. Davies

K'a-tu women

edges with stripes of red, white, and yellow. To complete the costume a very short jacket similarly ornamented is also often worn over the other jacket.

But the most remarkable thing about these Shans is that they are not Buddhists, but spirit worshippers. They are the only non-Buddhist Shans I have ever come across, except a few scattered families of the race whom I found in northern Yün-nan and in Tibetan Ssŭ-ch'uan. They have possibly lived so far from the influence of both Burma and Siam that Buddhism has never reached them. By Buddhism I do not of course refer to the religion of China, but to the Burmese form of Buddhism which is so universal among the Shans of Yün-nan.

The houses at Mo-sha are built of soft mud bricks and have flat roofs made with timber, covered with earth. These flat roofs are a peculiarity of the Hsin-p'ing Hsien district, in which we had now arrived. Chinese, Lo-los, and Shans all build alike, and use their roofs to sit on, and also as a place to stack wood and straw. This style of building I do not remember to have seen anywhere else in Yün-nan. We slept at Ta-t'ien-fang, a village which lies up a little side valley, and is called Ho-nam-tok by the Shans.

The next morning, the 11th January, we had a very steep climb up to Chiu-ti-mo, the road at one time rising 1,400 feet in a mile. We were here wrapped in dense mist, which did not clear till just before sunset. The mist in the Red River valley is curious. Down in the plain the air is quite clear and dry. The bottom of the mist is at about 3000 feet in the morning, extending up to 5000 feet. It then gradually rises till its top reaches 7000 feet, and it does not disappear till late in the afternoon. Villages like Chiu-ti-mo, which are at about 5000 feet, live in almost perpetual damp and darkness, and the mist makes it very cold all day.

Crossing a range we reached Hsin-p'ing the next day. The place lies far from all main roads, and the populace had apparently never seen a European before[1]. They had got wind of our coming, and the whole population lined the

[1] M. Rocher I find visited this town in 1872.

streets and crowded the house-tops to get a look at us. Work must have been entirely at a standstill for that afternoon. The crowd was however a very civil and friendly one. On arriving at the inn I found the enterprising landlord had arranged some reserved seats for his family and friends, so that they might watch whatever I did in my room. This was a little too much, and I was obliged to intimate that the performance was finished for the day.

The town of Hsin-p'ing is in two parts, one surrounded by a stone wall, the other by a mud wall. The officials live in the former, but all the shops are in the latter. The people are chiefly Chinese, but there are a few Lo-los in almost every village and even in the town. Doubtless it was a Lo-lo country originally, and many of the Chinese are of Lo-lo descent.

The plain is most of it on a slope and somewhat cut up by stony, uncultivated ground, but it appears to grow fairly good crops. Its height is over 5000 feet, and it is cool enough to grow opium and warm enough to grow sugar-cane, two crops that I have never elsewhere seen side by side. I bought here the best oranges that I have ever tasted in any country.

Our next three days' march lay through a poor country, without much water in it that can be used for irrigation. The streams are most of them little trickles over a bed of solid rock, with occasional muddy pools. On the third day we reached Ssŭ-ch'êng, a village at 6000 feet, which has the remains of a mud wall round it. On this last march we passed a small iron mine at a place called Chia-tso. It is only worked on quite a small scale and does not appear to be very productive. Most of the ore is smelted near the mine, where they have enough to keep one small furnace going.

From Ssŭ-ch'êng, crossing two more ranges, we arrived at Yi-mên-Hsien on the 17th January. It is a very small place, the town walls built round a little hill which stands out in the middle of the plain. But inside the walls are only about 50 houses, two large temples, and the mandarin's yamen. Nearly all the population live in a suburb to the south of the real town. The plain is five miles long and is well cultivated.

Yi-mên was the place where Ryder and I had arranged to meet, and he turned up the following day after dark, having done a 26 mile march. These meetings in out-of-the-way places are very pleasant, and we halted two days here together. Our pleasure, however, was considerably damped by the news of Stormberg, Magersfontein, and Colenso that Ryder had brought with him from Yün-nan Fu.

On the 21st January we set out again, Ryder for Ch'u-hsiung, myself for Yün-nan Fu. My road crossed the range which separates the basin of the Red River from that of the Yangtze at 7,350 feet, and then descended a little into a good sized plateau, with small hills rising out of it, very dry and therefore not much cultivated. We slept at Hsiao-lung-t'ang in a large temple pleasantly situated among trees.

The next day we reached An-ning Chou. The road lay down the course of a small river on which were a good many duck. I got five—three merganser, one brahminy (ruddy sheldrake), and one spotbill. The merganser is fairly common in Yün-nan, and I have found them quite eatable in spite of the fishy look that the shape of his bill gives him.

At An-ning we joined into the main road by which I had come from Ta-li the year before, and the next day we reached Yün-nan Fu. I cut off the last half of the march by taking a boat across the corner of the lake.

I was able to get the same comfortable quarters that we had lived in the previous year, and spent five days in the capital renewing acquaintance with Mr Stevenson and other missionary friends. Mr Jensen of the Telegraph Service, who had helped us so much before, had I was sorry to learn been laid up with rheumatism and had been obliged to take a trip home.

I found the French very active in Yün-nan Fu. There were 10 or 12 Frenchmen in the capital at the time of my visit, all connected with the railway which is to run up into Yün-nan from Tong-king.

The French were not at all popular with the Chinese, and there were even then signs that there was likely to be trouble. This feeling culminated a few months later in

a somewhat serious riot in which the French were attacked, and the English missionaries also had a very warm time of it. The riot was fortunately put down by the Chinese authorities without any European lives being lost.

Captain Ryder reached Ch'u-hsiung on the 25th, and we were able to observe for longitude, thus fixing the position of Yün-nan Fu and also of P'u-êrh, which we had so far only fixed relatively to the capital.

CHAPTER XXVIII

ACROSS THE YANGTZE TO HUI-LI CHOU.

Plans for the future—The Chien-ch'ang valley line—The outlet of the Yün-nan Fu lake—Fu-min Hsien—Meet Ryder at Wu-ting Chou—Pheasants for dinner—Lu-ch'üan Hsien—The P'u-tu Ho—Shan villages—Their origin—A villainous road—Precipitous crags—Leaky ferry boat—Lo-lo village—A fine race—Snow—A large plateau—Fine waterfall—A hospitable Lo-lo—Cold weather—Descent to the Yangtze—Hung-mên-k'ou ferry—Steep gorges—The Ssŭ-ch'uan boundary—High hills—The Independent Lo-los—The Lo-lo cloak—The Hui-li stream—A deep chasm—Impracticable country for a railway—Hui-li Chou—Copper mine—Indigo.

My object now was to explore the part of the Yangtze near the southern end of the Chien-ch'ang valley, to see whether a line for a railway could be found in this direction that would be likely to prove better than that surveyed by Lieutenant Watts-Jones and Lieutenant Hunter in the previous season. It was first necessary to find a way from Yün-nan Fu to the Yangtze. The valley of the river which forms the outlet of the Yün-nan Fu lake seemed to offer the most likely line, and I accordingly started off northwards to examine the course of this stream.

My pony died suddenly while we were at Yün-nan Fu, but for £4 I was able to replace him, and we left the capital on the 29th January. A day and a half of fairly level going brought us to Fu-min Hsien, a small town in a well-cultivated plain, through which flows the river which I wished to follow down to the Yangtze. The next day, the third from the capital, we crossed a range at 7,400 feet, and passing over some undulating ground reached Wu-ting Chou, a poor town in a poor plain.

Here by arrangement I met Ryder. His route from Ch'u-hsiung to Tung-ch'uan must cross mine somewhere, so we thought it a good opportunity to meet again. I had marched in on the Chinese New Year's day, so felt bound

to halt the next day to allow my Chinese followers to enjoy the occasion. We were also able to celebrate our meeting by dining off pheasant, for I shot two on the first march out of the capital.

On the 2nd February we set out again, and for this march our routes lay along the same road. Passing the very small town of Lu-ch'üan Hsien, we crossed a range and descended into the little plain of Hsiao-ts'ang at 6050 feet.

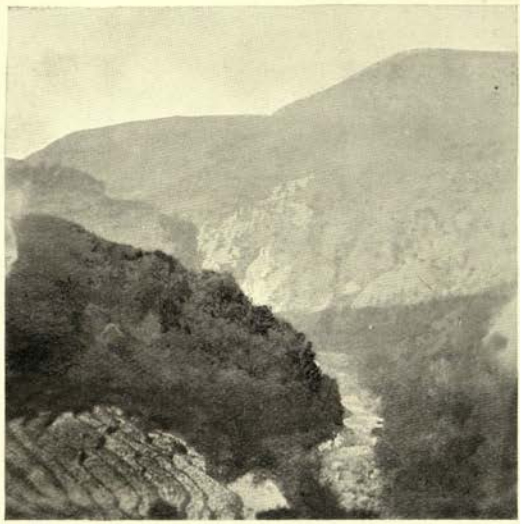
The next morning a path down a narrow valley brought us again to the Yün-nan Fu lake river, which in this part of its course is known as the P'u-tu Ho. It is here 50 yards wide with a strong current and is at a level of 5000 feet. After crossing the ferry Ryder and I separated to meet two months afterwards at A-tun-tzŭ. His road climbed the hills to the east; mine, a very bad narrow track, led down the valley of the stream.

I was surprised to find that a few of the villages in this valley were inhabited by Shans, a race I certainly never expected to find so far north. They say they came here hundreds of years ago from Ava. This is rather vague, but possibly they came originally from some Shan state which was at that time tributary to Burma. No priest accompanied them in their migration, and they consequently have lost both their written language and their Buddhist religion. They still, however, speak Shan. It would be interesting to know how they got to this out of the way spot. They seem to have no idea themselves why they came or exactly where they came from[1].

The following day I was able to get some 18 miles further down the P'u-tu Ho by a villainous road, and slept at the village of Ch'ien-ch'ang[2]. Below this I could hear of no path descending the valley, and the view we got of 10 miles of precipitous crags bordering the river on both sides made it appear probable that this information was correct. Nothing could well be more unpromising for a railway than the whole of this lower part of the P'u-tu Ho.

[1] Garnier mentions Shans at the junction of the Ya-lung River and the Yangtze. I believe there are a certain number of villages of this race scattered about this part of the Yangtze valley. It is possible that they are the remnants of a former Shan population.

[2] Not to be confused with the Chien-ch'ang valley.



Lower course of the P'u-tu Ho

Photos by Major H. R. Davies

The Yangtze at Hung-mên-k'ou

It was unnecessary therefore to try to follow this stream any further, so I struck across N.W. for the Hung-mên-k'ou ferry over the Yangtze. A steep descent from Ch'ien-ch'ang brought us to the P'u-tu Ho at 3,900 feet, and we crossed it by an extremely leaky ferry-boat, which half filled with water in taking across the first load of baggage. However they caulked it with strips of bark and everything was safely got across. The mules swam, and though the river is only 50 or 60 yards wide, the current was strong enough to carry them down quite 100 yards before they could land on the far bank.

From the river we had a climb of nearly 4000 feet to the Lo-lo village of Ts'u-chü. These Lo-los are a much finer race than even the best of those that I had seen further south. They are very tall men, with straight noses and sharp features, and are evidently of the same race as the Independent Lo-los of Ssŭ-ch'uan. The difference of stature and feature between different Lo-lo tribes I attribute partly to climate and partly to the mixing of the more southern Lo-los with other races. Certainly the colder the climate in which one finds them living, the sharper are their features and the taller their stature. Ts'u-chü I found a very cold place, and the sun had not had power enough to melt the ice by three o'clock in the afternoon.

On the 6th February our road led up and down over spurs, the highest point reached being 8,500 feet; but I could only guess at the lie of the country as the clouds were right down on the hills, and in the morning fell for two or three hours in the form of snow. Finally we came down into a large undulating plateau, inhabited chiefly by Lo-los, with several large villages and a good deal of cultivation. We slept in a temple at San-ying-p'an, one of the principal villages.

Our next march lay across this plateau at an average level of about 8000 feet. The plateau is watered by the sources of the little river which we had crossed five days before in the Lu-ch'uän Hsien plain. I had a little shooting on this march, getting a few snipe, and a plover which to my eye was undistinguishable from the common green plover of England.

On the 8th February we still kept on the plateau for

some miles, and then came into a valley which runs by a most precipitous gorge into the Yangtze. Where the plateau ends is a fine waterfall, with a sheer drop of 200 feet. A strong wind was blowing at the time, which carried the spray off quite 100 yards, and the sun shining on this turned it into a magnificent rainbow.

The road cannot follow this valley down, but turning away to the east crosses a spur at nearly 10,000 feet, and descends to K'a-hsi, where I found a very hospitable Lo-lo head-man, who put me up in his house and offered me snuff.

In the morning when I got up the thermometer was down to 21°, and a bitterly cold wind and a slight fall of snow made us very glad to get down into the warmer climate of the Yangtze valley, which is at an elevation of 2,850 feet. The river makes a very sharp bend to the north here, not previously shown in any map, and it is at the extreme north corner of this bend that lies Hung-mên-k'ou, the ferry by which we crossed.

The width of water is about 150 yards, and the river runs with a strong current between banks which for 200 or 300 feet up from the water's edge are everywhere very steep and in most places precipitous. Even the road leading down to and up from the ferry is so steep and rocky that the mules found considerable difficulty in getting over it. The hills on each side rise to a height of 11,000 feet, and are extremely steep and a mass of rocks and stones, with a few little ledges where there is just room for a small village and a little cultivation. The very difficult nature of this part of the country quite accounts for the main road from Yün-nan Fu to Hui-li Chou making a considerable circuit to the west by Yüan-mou Hsien and Lung-kai Ferry.

After crossing in a large boat we went on three miles to Ta-p'ing-ti, the nearest village to the ferry. The Yangtze is here the boundary between Yün-nan and Ssŭ-ch'uan, so we were now in the latter province. I have usually called the river the Yangtze as it is more convenient to call a river by the same name throughout its course. But to the Chinese it is here known as the Chin Chiang or Gold River. In Yün-nan Fu I have heard it called

Waterfall in tributary of Yangtze

Photos by Major H. R. Davies

Lo-los wearing the Lo-lo cloak

Chin-sha Chiang or Golden Sand River, but it does not seem to be known by this name to the people who live on its banks.

Following the Hui-li Chou road the next day for a few miles we reached the large village of T'ieh-chiang-ts'un. From here I turned off in a westerly direction to examine the country lying between Hui-li and the Yangtze with a view to seeing if there was any possible chance of a line for a railway. Our road took us among hills which command a magnificent view of the country all round, so that Lachman Jadu the surveyor was able to do a lot of work.

Ta-shih-p'êng where we slept is at an elevation of 8,800 feet. This village is inhabited by Lo-los who are an offshoot of the Independent Lo-los of the country further north, and came to their present village from the neighbourhood of Lei-po T'ing. The emigration took place a long time ago, and their dialect has somewhat changed, though they say that they and their northern fellow-tribesmen can still understand each other fairly well.

The son of the head-man was at the time of our visit away with a good many of the young men of the place, helping the Chinese in an expedition against some of the Independent Lo-los. They do not seem to have any objection to fighting against their kinsmen, but they say the latter are not really more turbulent than anyone else, but that they are led on to commit robberies and to disturb the country by outlawed Chinamen who have taken refuge among them.

Both men and women at Ta-shih-p'êng were wearing the Lo-lo cloak described by Baber. It is made of grey felt, which they weave themselves out of wool. It is fastened round the neck, has no sleeves, and hangs down to the knees. It must form an excellent protection against cold, rain, or snow.

For two more days I marched westward, examining carefully this very intricate country, and then turned north and crossed the stream which flows down from Hui-li Chou. Where I crossed it in the Hui-li plateau it runs in a curious chasm 1000 feet deep, with very steep sides of soft shale, and with no level ground at the bottom except the bed of

the stream. Below the plateau it disappears into deep gorges among the hills bordering the Yangtze.

On the 14th February we reached Hui-li, a town of 3000 houses with a good wall round it. It has broad streets and is more prosperous looking than any of the towns of Yün-nan, except perhaps the capital of that province. Its chief products are opium, tobacco, indigo, and copper. The copper mine is at Lu-ch'ang, six miles south of the town, and as Mr Ker had seen it the previous year I did not visit it. Indigo is to be seen growing everywhere in the fields, covered over at this time of the year with straw to preserve it from the frost. The large tanks in which they mix the dye are found in nearly every village as well as in the town. The height of Hui-li I made 6,250 feet.

CHAPTER XXIX

UP THE CHIEN-CH'ANG VALLEY.

Leave Hui-li Chou—The Yi-mên coal mine—Insect trees—Pai-kuo-wan—Mo-so-ying—The An-ning River—Mule falls off a bridge—A pleasant inn—Good view of a tiger—The Chien-ch'ang valley—Père Bourgain—The missionaries and the Chinese of Chien-ch'ang—French missionaries—French and English missionaries compared—Their methods of working—Their relations with officials—Ready help of both sects to travellers—Ning-yüan Fu—A Lo-lo army—"Stupid men not afraid of dying"—The T'ung-an-chou "Army Act"—Li-chou—Lu-ku—The Chien-ch'ang valley—Its crops, trade, and population—Theft at an inn—The Lo-lo country—Chinese forts—"Army regulations"—Têng-hsiang-ying—The Hsiao-hsiang-ling pass—Meet Ker and Hare at Yüeh-hsi T'ing—Impracticability of railway from Chia-ting Fu.

ALTHOUGH I was quite satisfied that a railway could not cross the Yangtze in this direction, I still had to keep my appointment to meet Mr Ker at Yüeh-hsi T'ing, and my journey through the Chien-ch'ang valley I felt would be by no means wasted. In fact no exploration of Yün-nan would be complete without a visit to this valley which though belonging to Ssŭ-ch'uan, runs right down into the former province.

Leaving Hui-li on the 15th February we followed up the plain by a gradually narrowing valley and crossed a pass to Yi-mên[1] which is a village of importance owing to its coal mine. We met quantities of mules, donkeys, and coolies carrying this coal towards Hui-li in the form of coke. All the smelting at the copper mines is done with this fuel. Another noticeable feature of this district is the "insect trees" on which are reared the white wax insect[2].

From Yi-mên we crossed another steep spur and slept at Pai-kuo-wan, a village which stands at a little under 7000 feet, and is nearly twenty miles from Hui-li.

[1] Not to be confused with Yi-mên Hsien (p. 206).

[2] See p. 169.

The next day we followed down the narrow valley of a small stream by a hillside path with steep reddish coloured mountains rising on each side. We stayed for the night at Mo-so-ying, a village of perhaps 250 houses.

On the 17th, the third march from Hui-li, we reached the An-ning Ho which here varies from 50 to 100 yards in width and flows with a strong current. This is the stream which runs down the middle of the Chien-ch'ang valley, and for the next few days we followed it up.

At Chiu-chuan-ch'iao, where we had to cross a good-sized tributary of the main river, we found the stone bridge by which it is usually spanned was under repair, and we had to make use of a very temporary wooden structure made of rounded logs tied together. So rough was the arrangement that one of the mules fell off it and his load which contained most of my cartridges was soaked through. Luckily they were nearly all brass-cased, and were none the worse after being thoroughly dried.

We were now down at a level of 4,300 feet or so, and found the sun a little hot in the daytime though the hilltops all round had snow on them. We slept at T'ieh-chiang-fang where I was lucky enough to get a very nice room in an inn, with the An-ning Ho running right under the window.

Soon after starting the next morning we heard the roaring of a tiger in the hills to the west across the river. Though evidently he was not far off, we could not make him out for some time, but finally he came out and lay down on a big rock to sun himself. He was about 600 yards off on a steep hillside, and as there was no means of crossing the river which lay between him and us, it was impossible to get nearer to have a shot. The tiger did not seem the least disturbed by our watching him, nor by the presence of several people who were going along a path on his side of the river about 500 yards below him. I took out my field glasses and watched him for quite five minutes: he would sometimes get up and walk round for a few yards and then lie down again on the rock, flapping the end of his tail. Eventually he got up and walked away into the jungle. This is the first tiger I have seen or heard of in western China, though I have occasionally come across

panthers' tracks. It is not often in any country that one would get such a good look at a tiger, and such an opportunity of observing his ways.

We were now well into the Chien-ch'ang valley. This part of it is not, however, a flat plain. In fact there is scarcely any really level ground, but between the hills on either side is a width of about a mile of gently sloping land which is cultivated in terraced fields. There are a fair number of villages, but this end of the valley does not strike one as extraordinarily rich.

We slept at Liang-lu-k'ou, a small village just opposite the town of Tê-ch'ang which is on the other side of the An-ning Ho, and is said to contain 700 houses. The river is here crossed by ferry in many places, and they were building an iron chain suspension bridge across it at Tê-ch'ang.

The next day I was overtaken on the march by a bearded horseman in Chinese dress whom I at once recognised as a French missionary. He turned out to be Père Bourgain who lives at Tê-ch'ang. We both slept at Huang-shui-t'ang, and had a very pleasant talk in the evening.

He is one of five priests who are established in this part of Ssŭ-ch'uan. They had had a good deal of trouble with the Chinese of this valley who are not very partial to Europeans, but the matter had been taken up and the missionaries had got the best of it, so the Chinamen were at present on their best behaviour. I certainly found them very civil the whole way up the Chien-ch'ang valley; and even in Ning-yüan Fu which has a very anti-foreign reputation I did not see any signs of unfriendliness.

Père Bourgain seems to have many converts, and has some even among the Lo-los, though he says it is very difficult to cure them of their habits of drunkenness.

It is impossible not to admire the zeal and unselfishness which induces the Catholic missionary to come to China there to spend the rest of his days in the cause of his religion, without any hope of ever seeing his native country again. For it is only in very rare instances that a Catholic missionary ever goes back to his own land. He makes up his mind from the beginning to live and die in China. Living alone, as most of them do, it is a very salutary rule that they have, that when possible every priest shall go and

visit one of his confrères once every month, thus mitigating to some extent the feeling of being constantly alone among strangers.

I have during my travels met several French missionaries, and it has always been a great pleasure to talk with a man whom one feels to be a fellow-countryman, for it is only necessary to meet in a country like China, to realise how very much alike are the ways of thought of all Europeans. Many times on the Tibetan border we were much indebted to the French priests for their advice and assistance, always so willingly given.

It is interesting to compare the different methods of the French and English missionaries. The Catholics have been in the field for more than two centuries and at one time enjoyed much favour at the court of Peking. Consequently they have many adherents who have been Christians for centuries, and it is as much in the character of a parish priest as of a proselytiser that the French missionary comes to China. In fact I believe that most of them do not do any public preaching themselves with the view of making converts, but depute much of the work of the extension of their faith to Chinese preachers drawn from their congregations. Being able to go about without attracting much attention, and knowing their countrymen thoroughly, these Chinese preachers can no doubt do much good work.

The Protestant, on the contrary, finds in western China no ready-made congregation to minister to. He often, in fact, establishes himself in a town in which there is scarcely a single convert. He associates freely with Chinamen of all classes, propagating his religion to some extent by public preaching, but more perhaps by private conversations. The progress, as far as Yün-nan is concerned, is usually very slow, but this is partly due to the refusal of the missionaries to accept converts unless they are prepared to show by a period of probation that their conversion is genuine.

The Catholics are perhaps not quite so particular in this respect. The Protestant argues that by taking anyone who offers himself, they will often get men who simply hope to get some employment through the mission, or those who being engaged in a lawsuit expect that the influence of the missionary will enable them to win their case.

Photo by Captain W. A. Watts-Jones

A French missionary and his congregation

The Catholic would answer that though a proselyte may fall far short of the standard of an ideal Christian, still, once include him in the Church, the influence of the priest will reform him or will at all events be able to bring up his children in the way they should go.

In their general attitude towards officials and people the French also differ much from the English missionaries. A French priest once remarked to me, "The only way to keep a Chinaman in order is to make him afraid of you." There is much truth in this remark, and for a traveller it is of much importance that he should do his best to enforce respect. But the object of a missionary is different from that of a traveller, and perhaps the French priests have carried the matter too far.

They have now successfully claimed official rank, and from all accounts are somewhat given to making their influence felt in cases where members of their congregation are concerned. This naturally gives offence to the Chinese officials, and brings unpopularity on the missionary. One must, however, admit that there is another side to this question: it would be very hard on a priest to have to see injustice inflicted on one of his congregation without doing anything to remedy it. However much officials may complain of the interference of priests, no one who knows Chinese mandarins will doubt that the action of the missionary is often in the interests of justice.

The Protestant missionaries adopt as a rule a different attitude. They refused the offer of official rank, which they had the right to claim when it was given to the Catholics. They try, in fact, to be friendly with those mandarins who show any inclination to be civil, but at the same time not to thrust themselves into official matters, and to do without the help of the mandarins as far as possible. Their idea is to conform as far as they are able to Chinese usages, and not to claim any special privileges.

I think that the Catholic system of making themselves feared ensures them greater respect outwardly and perhaps saves them from some of the insults and annoyances experienced by the Protestants. But perhaps, on the other hand, the Catholic in making himself feared also makes himself hated, and is apt to fare worse in any serious anti-foreign outbreak.

In these remarks I hope I have said nothing which will give offence to either sect. I shall always remember the missionaries I have met in western China, both French and English, as men devoted to the cause they have taken up, and always ready to offer hospitality and assistance to the traveller.

Père Bourgain returned to Tê-ch'ang the next day, so I had not the pleasure of his company any further. Our march of 19 miles was somewhat monotonous, the plain broadening out and becoming more level. The weather which had been a little warm quite changed again, and the snow on the hillsides was very nearly down to the plain.

We slept at Ma-tao-tzŭ, and on the following morning, sending my mules straight on by the main road, I made a circuit myself to have a look at Ning-yüan Fu[1]. This town lies three or four miles to the east of the road, separated from it by a low spur which runs down from the eastern hills. It is consequently not so flourishing a place commercially as some of the smaller towns which lie right on the main road, but officially it is the most important town in the district. It must contain nearly 4000 houses and is surrounded by a good wall three miles or so in perimeter. Just to the east of the city is a good-sized lake some five miles long. The story is that there was formerly a town there which was destroyed when the lake was formed by an earthquake or some volcanic disturbance.

After leaving Ning-yüan I was passed on the road by a Lo-lo chief with some of his soldiers. He was the T'u-ssŭ[2] of T'ung-an-chou, a place I had passed through a little time before between the Yangtze and Hui-li Chou. A year or two before this he had got up a sort of rebellion against the Chinese authorities, but the Hui-li mandarin was considered by the Chinese Government as partly to blame for this outbreak, so the T'u-ssŭ was pardoned on condition that he would fight for the Chinese against the Independent Lo-los who had lately been raiding. This he was nothing loth to do, as he is what in the dialect of western China they call a "kuai jên," "a bad man," i.e. fond of fighting. So in the recent hostilities the Chinese troops had been held in reserve while the Lo-lo levies had

[1] Also called Chien-ch'ang Fu. Hence the name of this valley.
[2] Local chief.

done most of the fighting for them. This is an arrangement that seems to suit everybody, for as the Chinese put it, "The Lo-los are stupid men who are not afraid of dying."

The T'u-ssŭ keeps up a small standing army, and every one of his men that I saw was armed with a breech-loader. He also appears to recognise the importance of discipline, for a man goes in front of his troops with a red placard on which is written the T'ung-an-chou "Army Act."

For not obeying bugle calls—To be beheaded.

For being drunk and fighting—To be put in the stocks.

For losing arms or ammunition—To be beheaded.

For destroying the property of civilians—To be beheaded.

For being absent at night—To be put in the stocks.

For gambling—To be put in the stocks.

For extorting money by threats—To be put in the stocks.

For taking a wrong rifle—To be put in the stocks.

For buying things and refusing to pay—To be put in the stocks.

We slept the night at Li-chou which in spite of its name is not an official town of the *chou* class, though it is a prosperous commercial place.

The following day, the 22nd February, we had another level march to the town of Lu-ku which is built where the two sources of the An-ning Ho meet, one coming down from Mien-ning Hsien, and the other and smaller branch from the Hsiao-hsiang-ling pass.

I had now been along nearly the whole of the Chien-ch'ang valley and a little later, on my road to Mien-ning Hsien, I was able to see the rest of it, so I will summarise here my observations on it.

The plain stretches from a little beyond Mien-ning Hsien in the north down to the village of Hsin-kai-tzŭ in the south. It is, therefore, about 110 miles in length, but has not an average width of more than two miles. Its elevation at Mien-ning is 6,250 feet, and from this it slopes down by a scarcely perceptible descent to some 4,200 feet in the south.

Besides the two official cities of Ning-yuan Fu and

Mien-ning Hsien, there are three flourishing towns Lu-ku, Li-chou, and Tê-ch'ang, and a large number of big villages, many of which must contain some hundreds of houses.

The whole of the plain is fairly well cultivated. In the extreme northern part round Mien-ning there is not much rice grown, and wheat, maize, and opium are the principal crops. But through the greater part of the valley there is plenty of rice cultivation, while wheat, beans, and opium are grown as winter crops. The white wax insect tree and the mulberry as food for silkworms are also cultivated. Copper and iron are mined in the hills, and probably much more mining could be done if the Lo-lo country to the east of the valley were more settled. Coal is found in the hills east of Ch'i-lung, a large village a few miles north of Li-chou.

I met nothing in the way of trading caravans except some native-made cotton cloth from Ya-chou Fu, carried in the Ssŭ-ch'uan fashion by men on foot, for mule or pony transport is but little used in this province. It is with this Chinese-woven stuff that the inhabitants of the valley are chiefly clothed. They find it cheaper, warmer, and more durable than the more finely woven products of England or India. No doubt much more trade passes along this road in April when the crops of white wax insects and opium are being gathered.

The whole population of the Chien-ch'ang Valley I estimate at 150,000. Though there are plains in Yün-nan which, both in riches and in density of population, would, in *proportion to their size*, compare favourably with this valley, yet there is certainly nowhere in Yün-nan such a large extent of well-populated country all in one plain.

At Lu-ku an unpleasant incident occurred. Lachman Jadu, the surveyor, had a lot of his things stolen out of his room in the inn. On a journey of this sort no one has any superfluous kit and the loss of almost any article is serious. By Chinese custom the innkeeper is responsible for any theft that takes place in his house, and accordingly I took him with me the next day and handed him over to the nearest official, the *Hsün-chien* at Mien-shan. As far as I know the thief was never caught.

Following up the eastern source of the An-ning Ho

Photo by Major H. R. Davies

Cormorant fishers in the Chien-ch'ang Valley

on the next day, the 23rd February, our road led up a very stony, little-cultivated valley hedged in by steep hills on each side. Every mile or so along this road are little forts as a protection to travellers from Lo-lo raids, but they only have garrisons of two or three men each, and no one seems to anticipate any danger.

In one of these forts I saw some more regulations written up after the manner of those of the T'ung-an-chou army. They were as follows:—

If when ordered out to fight, any soldier says he is afraid to go—To be beheaded.

If a soldier gets too old to fight—To be discharged.

For smoking opium—To be discharged.

I have little doubt that nine-tenths of both officers and men are confirmed opium smokers.

Passing the little town of Mien-shan about halfway, we reached Têng-hsiang-ying in the afternoon. This is a fortified village of some 150 houses, and is the head-quarters of the major who commands all the troops in the Hsiao-hsiang-ling pass. It is built just where the narrow valley gets still narrower, and is at a height of 7,850 feet, 2,200 feet above Lu-ku, though the rise is so gradual as to be hardly noticeable. The roofs of the houses here are made of planks kept in their places by large stones placed on top of them. This is a style of roof I found not uncommon in parts of western Ssŭ-ch'uan.

On the 24th February we crossed the Hsiao-hsiang-ling pass. The top I made exactly 10,000 feet. There were only a few patches of snow in shady places, but the last three or four days had been sunny; no doubt in cloudy weather the whole top of the pass would be in snow at this time of year. The ascent from the south is very gradual. In fact it is, without exception, the easiest road up a high range that I have ever seen in western China. The descent on the northern side is however steep, the road falling at the rate of 1000 feet in a mile.

The top of the pass is in a saddle, so Lachman Jadu and I climbed up a hill 1000 feet higher and got a fairly good view of the country round. To the east is a mass of high and steep ranges inhabited by the Independent Lo-los.

I could see no villages on them, but possibly they build their houses in the valleys. To the north lay the Yüeh-hsi plain, but to the west one could only see a few miles, as high ranges hid the view.

We slept at Hsiao-shao and the next day had a level march into Yüeh-hsi. Fortunately I had sent my interpreter on ahead to look for an inn, for on arriving at the town he heard that Mr Ker had just left it. By sending a man after him he was able to catch him. It appears that a telegram I sent saying I could not be at Yüeh-hsi till the 25th had never reached him. Our original date of meeting had been arranged for the 20th, so that Ker, not knowing of any alteration, had waited five days, and had then started back for the nearest telegraph office to try and get news of me. Luckily he had made a late start that morning, so our meeting came off all right after all.

With Mr Ker was Dr Hare, a medical missionary of the Canadian Mission at Chia-ting Fu, who, having a liking for travel, had managed to get away for a short time to accompany Ker on his journey.

Two days we spent together very pleasantly, comparing notes on our journeys. Ker had found the line from Chia-ting to Yüeh-hsi as impracticable as I had that from Yün-nan Fu to Hui-li. Of news of the outer world they had no more than myself, and we were all in happy ignorance of Spion Kop.

CHAPTER XXX

WESTWARD FROM MIEN-NING HSIEN. THE BENDS OF THE YA-LUNG.

Ker and Hare leave Yüeh-hsi—My future plans—Through a Tibetan country—Expected difficulties—Lie of the country—Return to Lu-ku—Mien-ning Hsien—Enquiries about roads—A Chinese map—A Chinese quarrel—Start off westward—A steep range—Timid Lo-los—Chaunting pilgrims—Mo-sos—Hsi-fan tribes—The Tibetan yell—A rough road—Death of a mule—The Ya-lung River—Its name—Lu-ning-ying—Enquiries about Mi-li—The bends of the Ya-lung—A precipitous mountain range—A difficult path—Slippery with ice—The Ya-lung again—No-po ferry—The Lo-p'ŭ Hsi-fans—Their religion—The Miao-tzŭ—A more Tibetan country—Pagodas—Praying wheels worked by water—The cause of the bends of the Ya-lung—Enormous mountain mass—Lo-lo village—A Lo-lo chieftainess—Potatoes—A varied population—Cedar forests.

On the 28th February our pleasant meeting came to an end. Ker's road lay through Ya-chou to Ch'êng-tu, the capital of Ssŭ-ch'uan, and Hare had to return to Chia-ting. Myself, I had now finished with civilised China. My route lay westward over the mighty snowy ranges which, inhabited by Tibetan, or semi-Tibetan tribes, form the western part of the province of Ssŭ-ch'uan.

It was a more inspiriting prospect than the paved roads and dirty towns of the Chinese. It is true that the traveller in Yün-nan may often go many days or even weeks without seeing much of the Chinamen of the cities, and may make many pleasant marches among friendly aboriginal tribes and the no less friendly Chinamen of the hills. Still even in the most secluded spots he cannot but feel that he is in a country where Chinese customs have got the upper hand. The regions I was now going to visit, though nominally in the eighteen provinces of the Middle Kingdom, are really beyond the reach of Chinese law, and the very few Chinamen who ever penetrate into this country do so only on sufferance.

I could not, however, disguise from myself that however pleasant it might be to get free of Chinamen, the absence of Chinese ideas of law and order might also increase my difficulties, and that perhaps the Peking passport with which I was provided would not always meet with the respect shown to it by a mandarin.

My purpose was to find as straight a way as possible from where I was at Yüeh-hsi to A-tun-tzŭ in the extreme north-west corner of Yün-nan. The trend of all the rivers and mountain ranges in the intervening country would certainly be from north to south, exactly across my path, and I had no anticipation of being able to find a very direct road. In fact my difficulties in this way began at once, for though Yüeh-hsi T'ing and Mien-ning Hsien are not very far apart in a straight line, there is nothing but a difficult footpath connecting the two places. I had, therefore, with my mule transport, to go back by the road I had come as far as Lu-ku, and then make a twenty mile march northward to Mien-ning.

This town is surrounded by a good wall, half a mile square, and judging by the crowded appearance of the streets, seems to be a thriving place. My first care on arriving was to try and get some information about my route westwards. In the previous year I had heard from Mr Amundsen of the China Inland Mission of a place called Mi-li, which, from the position he placed it in, must lie more or less between Mien-ning and A-tun-tzŭ. No one in Mien-ning had ever heard of such a place, nor was my Chinese map of Ssŭ-ch'uan of any assistance, for this, though sufficiently accurate in the settled parts of the province, gets very vague in the more out of the way borderlands, in fact consists chiefly of blank spaces.

However the magistrate of the town was civilly inclined and lent me the official map of his district. On this was marked a place called Lu-ning-ying, which was known to the people of Mien-ning and was in the right direction, so for this place I determined to make.

Our last night in a Chinese city was made hideous by a particularly noisy dispute just outside the inn. It began as usual with vehement abuse shouted with extraordinary vigour by both combatants. This is generally both the

beginning and the end of a Chinese quarrel, but on this occasion the usual peacemakers were not to the fore, and the words were succeeded by the sound of heavy blows resulting in one of the disputants falling down yelling and screaming. The conqueror, after enjoying his triumph for a short time, went away, and no sooner was he out of hearing than the defeated combatant, still lying on his back, began to kick his legs up and down on the ground like a naughty child, and for a good half-hour yelled abuse in unprintable language.

Our first march out of Mien-ning was a short one, for on arriving at Ha-ha-hsün, 9½ miles off, we found ourselves confronted by a big range of mountains, which our mules would scarcely have been equal to surmounting that day.

The next morning, the 5th March, a very steep rocky road took us to the top at 11,700 feet, the last 3000 feet of ascent being done in two miles. Lachman Jadu and I climbed up a peak 600 feet higher and were rewarded with a fine view of big mountain ranges. The highest peaks were white, but there was not so much snow as I expected to see. We seemed to be passing through a spell of particularly fine weather. The descent on the western side of the pass was as steep as the ascent had been, and we spent the night at 7,600 feet in Ma-t'ou-shan, a village which consists of two large inns in a narrow valley, shut in by wall-like hills.

One or two unusual incidents had relieved the monotony of the day's march. As we were nearing the top of the pass, one of my Chinamen, who had got behind, came up and said he had seen some Lo-los hiding near the road we had just come along. It looked as if they were going to waylay our mules, so I was preparing to interview them with a gun and a rifle. But these preparations were needless, for just at this moment they all took up loads, put them on their backs, got back into the road, and went on down the hill. They were evidently harmless people, who, frightened at the sight of strange looking, strangely dressed men, had been hiding in the jungle to let us go by.

A little further on I became aware of a curious noise like the buzzing of bees, and having a lively horror of wild

bees' nests bred of experience in Indian jungles, I was looking round to see where it came from. The noise got nearer and nearer, when six men suddenly appeared round the corner of a zigzag. It was not till I actually saw them that it dawned on me that the noise I had taken for the humming of bees proceeded really from human throats reciting prayers in a monotonous mumble. The deception was most perfect. Neither myself nor the Chinamen with me doubted when we first heard the noise that it was a swarm of bees or hornets. The men belonged to the Mo-so tribe and were on a pilgrimage to a temple in the Chien-ch'ang valley. This is a race of men I have seen very little of. They appear roughly speaking to inhabit the country north of Li-chiang Fu, and from there westwards towards Wei-hsi and northwards nearly to A-tun-tzŭ. Most, if not all, of them have adopted Tibetan Buddhism. Captain Ryder came across them in the town of Yung-ning (lat. 27° 45′, long. 100° 40′), where they constitute the bulk of the population. By the evidence of their language they are closely connected with the Hsi-fan and Lo-lo races.

The men we met would stop their chaunt for a moment to answer a question, but would begin again at once afterwards. We were evidently getting near a country under Tibetan influence. What Chinaman would think of reciting prayers as he went along the road?

The Mo-sos were not the only new race I was to see on this march, for soon afterwards we met some Hsi-fans, carrying loads of a sort of spice called *hua-chiao*, which they grow extensively about here. Just after they had passed us, the last of them, an elderly man, gave vent to his feelings in a loud noise in a high tone of voice, more like a shriek of forced laughter than anything else. I thought at first he was amused at something, possibly at my personal appearance. The Chinese guide said it was their way of singing—a somewhat vague explanation. It was a noise I often heard afterwards among Tibetans, and is simply a means of calling to each other when distance makes a loud yell necessary to attract attention. It sounds a most extraordinary noise at first, but one soon gets accustomed to it in Tibet. One of my Gurkha sepoys told me the people

in the Naga hills on the Assam border indulge in the same sort of call.

Hsi-fan in Chinese simply means "Western Barbarian," and is certainly a vague designation, but at the same time it is a useful general name for a family of tribes who form a sort of connecting link between the Tibetans and the Lo-los. In manners and customs they are most of them Tibetan, though not all the Hsi-fans have adopted the religion of the lamas. The language of some of the tribes is almost a dialect of Tibetan, but among others the speech is more closely connected with Lo-lo.

The next day we struck the Ya-lung River, after five miles of marching, and turned down its left bank by a very rough hillside path. One of my mules in a bad piece of steep narrow ascent lost his balance, fell over the hillside, and coming with all his weight on a sharp rock was killed on the spot.

The river here is about 100 yards wide, and as its height is not much more than 5000 feet and it is shut in by very steep hills, we found the valley rather warm. As usual, in China, there is much confusion about the name of this river. Locally it is called the Chin Chiang and in fact is considered the main branch of the Yangtze, the latter being known as the Pai-shui Chiang above the confluence of the two rivers. I have never heard any Chinaman call it the Ya-lung Chiang, but it is so named on the Chinese map of Ssŭ-ch'uan and also on the small district map I saw at Mien-ning. Mr Rockhill says this is a corruption of Nya-lung, the Tibetan name. For geographical purposes it will be better to stick to the name of Ya-lung River by which it has become generally known to Europeans. The Chinese name Chin Chiang or Gold River is not inappropriate, for I saw men washing for gold in the river bed, and they said they got a fair quantity.

Crossing by ferry we had a very steep climb up to Lu-ning-ying, a village of 150 houses, on a well cultivated, steeply sloping terrace.

We did not get in till dark, so I had a day's halt here to rest the mules and to get information about our future route. Mi-li was the place to which I wanted to find a road, but no one in Lu-ning-ying had ever heard of Mi-li. At

last an old man was produced who had been to a place called Mu-li, which he described as a large Tibetan town with a lot of lamas, lying eight days off to the west. This sounded right, and I afterwards found that, though I believe Mi-li is the correct Tibetan pronunciation, the place is always called Mu-li by the Chinese.

As long as we kept going westward, I knew we must reach A-tun-tzŭ eventually, so I determined to start for "Mu-li." Further enquiries as to the road elicited from the old man the astounding information that to get to Mu-li, which lay *west*, we should have to twice again cross the Ya-lung River, which was now running north and south only two miles *east* of us. I tried to persuade him that it must be two other rivers we had to cross, but he stuck to his point, and as other people corroborated him, I began to think there must be something in what he said. Eventually I found he was perfectly right. The river, the whole of whose course is approximately north and south, makes a sudden sharp curve round and for 40 miles flows from south to north, and then bending right round again continues in its original southerly direction. We had had the bad luck to strike it in the middle of this great bend, and so had to cross it three times.

The discovery was interesting geographically, as this bend is not shown on any Chinese or other map. Subsequently, in Shanghai, I met Dr R. L. Jack, who a few months afterwards had made a journey a little to the south of mine and had just missed the bend. He had been much puzzled by the lie of the country to the north of his route, and it was not till I told him of the bend that he was able to clear up the mystery.

Lu-ning-ying is the last place in this direction over which the Mien-ning official has any real control. There is a small military mandarin here who was very civil, as Chinamen usually are in out of the way places. He sent the local Hsi-fan chief with us to conduct us as far as the territory of the No-po chief, who was his next neighbour to the westward.

We left Lu-ning-ying on the 8th March. Straight in front of us to the west was a forbidding-looking range, culminating at the top in a nearly sheer precipice of 4000

Photo by Major H. R. Davies

Tibetan pagodas

or 5000 feet. To turn the flank of this obstacle it was necessary to make a circuit to the south. Even this entailed a fairly trying climb, and we had ascended to over 12,000 feet before we reached the top.

The way down on the other side was no better. It began with stone steps and steep zigzags, and then got into a rough rocky ravine with water running down it, which sometimes flowed above ground and sometimes beneath it. On each side rose precipitous hills to thousands of feet above us—a very fine country to look at, but a little difficult for loaded mules, who slipped about a good deal on the ice which covered the road in shady places.

Finally we turned out of the ravine and reached a tumble-down inn just short of the Hsi-fan village of Chieh-hsing. There sure enough below us to the west was the Ya-lung River again, flowing from south to north, so I could no longer doubt the geographical information of the Lu-ning-ying people.

The direct route to the west was again blocked by a formidable mountain chain, which rises to a height of 16,000 feet on the other side of the Ya-lung. Our road consequently led up the valley of that river, but keeping some thousands of feet above its level. For two days we continued in this direction, crossing big spurs, with scarcely a level inch of road, through a country very sparsely populated by Hsi-fans and Chinese. On the second day we crossed the river by ferry and reached the village of No-po.

Here we were in Mi-li territory, for the No-po chief is only a small man under the Mi-li king. We were also among a different tribe, for though both are called Hsi-fan by the Chinese, the people of Lu-ning-ying district are Mu-nia, while the No-po villagers call themselves Lo-p'u. The former name is doubtless the same as the Menia of Baber, and the Manyak of Hodgson. The next day I came across two fresh Hsi-fan tribes, who are called Êrh-su and Balamin.

I had not time to get vocabularies from all these. Perhaps some of these names are only small tribal divisions, but there seemed no doubt that the Mu-nia and Lo-p'u spoke different languages. Neither of these tribes

have adopted Tibetan Buddhism. Their religion includes the sacrifice of animals, I was assured by the people of No-po. The Hsi-fans I found everywhere most friendly. It is not till one gets into a country that is more under the thumb of the lamas, that obstruction begins.

Leaving No-po on the 11th March, we were obliged to make rather a short day as, after crossing one big spur, we still had the main range, with 6000 feet more of climbing, in front of us, and I did not think our mules would be equal to this. We slept at Mo-tzŭ-kou among the Miao-tzŭ or Mhong, a tribe which I have found scattered in small and widely dispersed communities all over western China. I had met some on the road the day before who had tried to emigrate southward, but had been driven away by the Lo-los, who considered the land in that part of the country to belong to them. In Kuei-chou province the Miao-tzŭ are very numerous and powerful, but here they are evidently too few to be able to afford to quarrel with their neighbours.

We were now getting into a more Tibetan country, and on this march saw for the first time pagodas and praying wheels. The former, some twelve feet or so high, were made of more or less conical-shaped heaps of stones with Tibetan inscriptions on them, and usually a wooden pole sticking out a little way at the top. It was a sort of rough version of the Burmese pagoda with its *hti*.

The praying wheel consisted of a cylinder about three feet long and one and a half feet across, made of leather, and said to contain religious writings. The cylinder was fixed on to the top of a little water wheel which, worked by a small stream, revolved continually. The whole was protected by a stone shed well roofed in. It was a work of merit, which must have cost a good deal of time and money to erect in this out of the way spot. These water praying wheels were fairly common in the Tibetan country we travelled through, and when we got into a thoroughly lama district the ordinary praying wheels turned by hand were to be seen in every house.

The next morning we crossed the big range, reaching the top at 13,200 feet, but to the north of the road the range attains a much greater elevation than this. The

The Lo-lo chief's wife at Ma-huang-kou

Photos by Major H. R. Davies

Miaos near the Ya-lung River

course of the Ya-lung can be traced from the top of this pass. Just where it makes its great bend to the north, its further progress southward is barred by an enormous mountain mass rising almost sheer from the river to a height of thousands of feet. The country in that direction is under the Hsi-fan chief of Kua-pieh[1], who is nominally subordinate to the Yĕn-yüan Hsien mandarin.

A steep descent to a little valley and another 1000 feet of uphill brought us to the Lo-lo village of Ma-huang-kou at 10,300 feet. The villagers were at first somewhat taken aback by the appearance of such curious-looking people, and were not much inclined to sell us anything. However the appearance of the chief's wife, a large proportioned lady of some 40 years, altered all this. She immediately turned out all the villagers, ordered them to sweep a place clean for my tent, and to bring us anything they had to sell. Her subjects soon became as friendly as they had previously been suspicious.

This country is so very poor that it is by no means easy to get enough to eat even for such a small party as we were. Corn of any sort was scarce and the mules came off badly. I was more fortunate, as I found the people here grew potatoes—a luxury indeed to the traveller in China. It is usually only among hill tribes that one is occasionally able to get this vegetable. The Chinese do not seem to appreciate it, though it grows well in the few places where it is cultivated. I remember getting excellent potatoes in Tung-ch'uan Fu and T'ung-hai Hsien. They were, I believe, originally introduced into China by French missionaries, and in Yün-nan they are called *yang yü*, the foreign yam.

To illustrate the varied population of this country I may mention that for five days we had now slept among a different tribe each night—Mu-nia Hsi-fan, Chinese, Lo-p'u Hsi-fan, Miao-tzŭ, and Lo-lo. Each of these people's language is unintelligible to all the others. The *lingua franca* of the country here is still Chinese, though further west Tibetan was much more generally known.

[1] This place is described by Dr R. Logan Jack in *The Back Blocks of China.*

Another hilly march the next day brought us to Mo-lien, which is also inhabited by Lo-los. Much of our road lay through very fine pine forest. This tree, called *sha-mu* by the Chinese, is much valued by them for making coffins, for the manufacture of which the best wood that a man can afford is always used. Among a Chinese population these forests would be of immense value, but here they are quite wasted. One sees magnificent trees cut down and burnt simply to get ashes to manure the fields with.

CHAPTER XXXI

MI-LI, THE LAND OF THE YELLOW LAMA.

The San-ko-ya monastery—The eastern Tibetan—A tall straight-featured race—The Ya-lung again—Suspicious ferrymen—Our useless appeal to the lamas—Further negotiations—My interpreter wins the day with threats—We cross the river—Pê-tiao—Attempts to mislead us—A friendly monastery—Camp in the forest—Gold mining—Magnificent peaks—K'u-lu—Yaks—A cold night—Suspicious lamas—"Have you not come to dig for gold?"—The Chinese rank of the K'u-lu lama—A hospitable family—The reasons for Tibetan suspiciousness—An obstructive guide—We reduce him to reason—Interview with a lama—His objections overcome by the passport—The Mi-li river—A steep climb—Reach Mi-li after dark—A large monastery—Well-built houses—Tibetan and Chinese houses compared—Mr Amundsen's visit to Mi-li—The Mi-li prime minister—Present him with salad oil—Chinese traders—Gold washing—Extreme protectionist measures.

We had now been for four days within the boundaries of Huang La-ma Ti-fang, "the land of the yellow lama," as the Chinese often call the kingdom of Mi-li; but as yet we had seen no lamas and had not encountered the opposition from the Mi-li king which had been prophesied for us by the Chinese. The next day, however, this peaceful state of things was to come to an end, and we were to have our first experience of that suspicion and obstruction which, when continued day after day, are so wearing to the traveller in Tibetan countries.

Leaving Mo-lien we crossed the top of a ridge and began a long steep descent to the Ya-lung. A little way down from the top we came to San-ko-ya our first Tibetan monastery, a two-storied building of whitewashed stones, built all round a courtyard. Two of the lamas were sitting outside, and as they understood a little Chinese, we had some conversation.

These Tibetans are very different from the Hsi-fans, and are, I think, also fairer in complexion than and superior

in physique to the Lo-los. They are very big men, much bigger than the average of any nation of Europe, with straight noses and reddish complexions. This is the prevailing type in the part of eastern Tibet in which we travelled, though mixed up with them, one also finds men, and especially women, of rounder and more Mongolian features. Also somewhat smaller and darker men are to be met with sometimes. The race, like nearly every other race, is doubtless a mixed one.

Descending 4000 feet from the monastery of San-ko-ya we found ourselves for the third time on the banks of the Ya-lung. The ferry-boat was on the other side of the river, and unfortunately the ferrymen also lived on the further bank. We began the usual shouting to attract their attention, and were met with an absolute refusal to bring the boat across.

"We don't know who you are. For all we know you may be coming to attack us, and at all events we cannot ferry you across without orders from the head-man," was the answer they shouted. Here then was our first experience of Tibetan ways. The size and strength of current of the river precluded all idea of swimming across to get the boat. In fact as long as they chose to stay on the other side, the game was clearly in their hands.

Finding argument and persuasion wasted on the ferrymen, my interpreter and I climbed 3,500 feet again to see the head-man who lived near the monastery. When we got there we found he was away, so we tried the lamas who had seemed fairly civil in the morning. They were at the moment engaged in their devotions which they performed to the accompaniment of loud bangings of drums and blowings of horns. Occasionally what appeared to be cakes of dough were brought out by attendants and put out of doors, probably as a work of merit, for the crows and other birds to eat.

In half an hour or so the ceremony was over, but our time had been wasted. The lamas said they had nothing to do with the affairs of the world and had no authority over the ferrymen. Doubtless if they had liked to send orders, they would have been obeyed at once, but seeing they did not intend to help us we descended again to

the river bank, and resumed negotiations with the ferrymen.

Huang-hsin-chai, my interpreter, had on more than one occasion proved himself useful in overcoming difficulties of this sort, and he was eventually so far successful that they agreed to let one or two of our Chinamen cross the next morning and argue the point with the chief on that bank of the river. Having settled this we loaded our baggage up again and went back, aided by the light of a full moon, to a place a mile or two off where there were a couple of houses from which we were able to buy corn for our mules.

The next morning my interpreter with one of our Chinamen went across taking my passport with him. It was an anxious time, as with the river in front of us and the ferry boat on the other side, we were so completely in their hands. I had, however, another plan in case the interpreter should fail. This was to go back some miles by the road we had come by, as if we intended to return, and then to turn off southwards by a road I had noted the day before to Wa-li ferry. Here I hoped we might have better luck, especially as it led to the territory of the Hsi-fan chief of Kua-pieh, who was not likely to be so suspicious of strangers as the Mi-li lama king.

From our camp I anxiously watched Huang go up the steep hillside on the other side of the river to the chief's house. By great luck there happened to be a Chinaman from Yen-yüan Hsien staying the night there, and he was able to read the passport to that very suspicious individual. It took an hour's conversation, chiefly threats, to bring him to understand the consequences that would ensue if he disregarded the Emperor's passport. At last he gave way. The boat came over, and we went across and camped at Pê-tiao outside the chief's house, disregarding his inhospitable remark, that there was a much better camping ground half a mile further on.

The people were very suspicious and watched our camp all night. What they thought we were going to do I don't know. Tibetans do not trust each other very far, and seldom let a stranger sleep in their houses, so it is certainly not surprising that such very curious-looking people as

myself and my Indian followers should be looked on as robbers, at all events till we had proved ourselves honest. However they sold us corn which was all I wanted.

The next morning our friend the Pê-tiao chief was very much on the alert. I saw him have a whispered conversation with our guide, evidently giving him some special orders. The result of the whispering was soon apparent. After going a short distance the guide tried to take us by a track that seemed to lead too far to the south. I sent Huang to a house close by and he found out from a little girl that our road led straight on westwards.

At this moment a lama who had been at Pê-tiao came up and began to protest vehemently that we were on the wrong road and that the guide was quite right. He was a stout middle-aged man and had evidently run up the hill after us, as his face was streaming with perspiration. One might have thought he was our best friend trying to save us from going wrong, but he overdid the part. It was impossible to believe in the sincerity of a man from a place where we had met with such a particularly cold reception.

After crossing a ridge we came to another place where two roads parted. Here our friend the lama again arrived on the scene and tried to persuade us to go to the right. A passing Chinaman put us right this time and in a few miles through fine forests we reached the monastery of Pa-êrh.

This was one of the most friendly monasteries I ever came across. The head lama came out and I made Huang read the passport to him. This seemed to impress him very much and he sold us as much corn as we wanted, and also made me a present of some flour, rice, and dried meat for which he would take no payment.

The fat lama again turned up at this moment shouting out at the top of his voice "You can't get any corn here. There's your road." However when he found we had already established friendly relations, he quite appreciated the joke and joined in the laughter at his own expense. So we parted the best of friends.

Crossing another ridge at 12,700 feet, we went down 1000 feet lower and found a nice sheltered place in the forest to camp in, with good grazing for the mules.

Continuing our journey the next day, the 17th March, we passed through splendid forests along the course of a stream in which we found a party of Tibetans digging for gold. Leaving this valley we ascended another range, reaching the top at 14,500 feet. Lachman Jadu and I climbed up 500 feet higher and got a fine view of the surrounding country. In the distance to the north-west of us, two magnificent snow-covered peaks towered above the rest to a height that I should estimate as quite 20,000 feet.

From here we descended to K'u-lu[1], a village of perhaps 60 houses and some large monasteries, the biggest place we had seen for many days. The lamas had evidently got news of our coming, for we found a man waiting for us who showed us a house, and room to camp round it, a little outside the main village.

K'u-lu was the most thoroughly Tibetan place we had yet come across, and it was here that I saw yaks for the first time. There was one tied up just outside our camp, which presented a curious appearance in the morning, covered with icicles hanging to its hair all over. So far I had been agreeably surprised with the warm temperature, for even at night there had only been a few degrees of frost, but here at K'u-lu at 12,500 feet it was decidedly colder, and the thermometer fell to 17°.

The people here are thoroughly Tibetan in manners and customs, and very few of them understand any Chinese. They live in large well-built stone houses, calculated no doubt to keep out the cold which is probably often more severe than we found it in March.

The lamas of K'u-lu were very suspicious. They asked me to halt a day so that we might talk things over and arrange for the continuance of my journey. I did not see what in the world we had to talk about and would not agree to this.

The next morning my interpreter went to the village to see about a guide, and was asked into the monastery by the head lama. He found that dignitary having an early break-

[1] Mr Amundsen marks a place called Kang-u about where K'u-lu is. Probably Kang-u is the Tibetan and K'u-lu the Chinese name. See *Geographical Journal* for June 1900.

fast and using a *gold plate* to eat off. Here was then the reason for the suspiciousness with which strangers are looked on in Mi-li. The country is probably rich in this metal, and the Mi-li lamas are determined to keep it for themselves.

"What have you really come for? Have you not come to dig for gold?" was the first question the lama put. Huang was able with perfect truth to assert that we did not know till the day before that there was any gold in Mi-li, and that we were merely passing through the country on our way to A-tun-tzŭ. With ready Chinese fluency he added that the English and Chinese nations were like brothers, that I was a very high official, and that if I was hindered in any way, they would get into very serious trouble with the authorities at Peking.

Whether they believed him or not they gave me a guide, and we were able to start, though as will subsequently appear the guide did not turn out a complete success.

It is interesting to note that though K'u-lu is such an insignificant place, the head lama has the rank of a *chih-t'ing*. The Chinese Government seem occasionally to confer these dignities on chiefs of non-Chinese tribes. This probably accounts for the appearance on many maps of Yung-ning, a small Mo-so town in north-western Yün-nan, as Yung-ning Fu. There is certainly no Chinese mandarin of *fu* rank there, and Chinese official language would describe the town as a *t'u-fu* or *aboriginal fu*, a place very inferior in importance to a regularly constituted *fu* district.

Leaving K'u-lu we crossed a pleasantly wooded spur and arrived in the afternoon at A-pê-ti, a village of a few scattered houses. In one of these we were most hospitably received by an elderly lady with a large family of sons and daughters, who helped to unload our mules and did everything they could for us.

Though the traveller in Tibet finds the inhabitants as a rule inhospitable if not actually hostile, I do not think that this is due so much to any real unfriendliness to strangers as to the suspicious attitude which the nature of the country naturally engenders. I believe the Tibetans to be

on the whole a kindly and goodnatured race. But law and order are by no means firmly established in their country, and it is no more than a necessary precaution that they should wish to know something about a stranger before they become too friendly or take him in as a guest. This is their feeling even towards travellers of their own race, and it was only natural that they should be still more suspicious of a party composed of Englishmen, natives of India, and Chinese, who might for all they knew have been brigands, and who at all events could give no reason for their journey which would appear satisfactory to Tibetan understandings.

However natural this attitude of suspicion may be, it gives a lot of trouble to the traveller, and we were to have some experience of this on the following day. After we had gone a short distance on our way to Mi-li the guide sent with us from K'u-lu, who had I thought gone back the day before, overtook us again. It struck me at once that he must have come on to hinder us, and it soon turned out that I was right. At the first village we reached, about three miles from our starting point, he proposed that we should halt for the night. When I indignantly refused, he began to argue, and said that the road to Mi-li went round to the north. This I knew was a lie. He then asked in an impertinent manner what my business was in Mi-li, and why I wanted to go there. As he was merely a guide with no authority to ask questions at all, I saw the time for action had arrived and gave him a whack or two over the back with my stick. My example was followed with what I thought almost unnecessary violence by Huang, my interpreter, and the Tibetan was very soon reduced to tears and groans. It appears that he had turned up at our camp of the previous night and tried to persuade the people not to sell us corn. Huang had heard of this. Hence his vigour in paying off old scores.

On the first sign of a fray, all the villagers had run away inside their houses and locked the doors, so we were left entirely alone with the completely humbled guide, who now walked meekly along with us on the direct road to Mi-li.

We had not gone very far when we found a lama with

several followers sitting on the ground a little way off the road. He beckoned to me to come to him. I told him he could come to me if he had anything to say, and he accordingly did so.

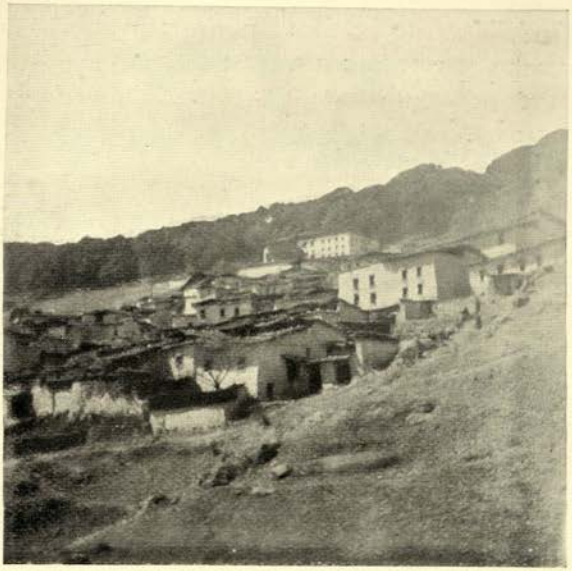
"Where are you going and what have you come for?" was his first rather natural question. I told him I was passing through Mi-li on my way to A-tun-tzŭ. He began to demur to my going on to Mi-li, said the king was away at another monastery, and enquired what presents I had for his majesty. I said I had no particular business with the king to induce me to go out of my way to visit him, and that I had no presents for him. I then had my passport read to the lama. He understood Chinese well enough to realise that this document could not be disregarded, and had nothing more to say, so we went on.

This part of the country is entirely under the influence of the Tibetan lamas, and no Chinese official ever comes near it, but still it is nominally part of the province of Ssŭ-ch'uan, so that a passport meets here with a respect that would not be shown it in the part of Tibet beyond the Chinese frontier.

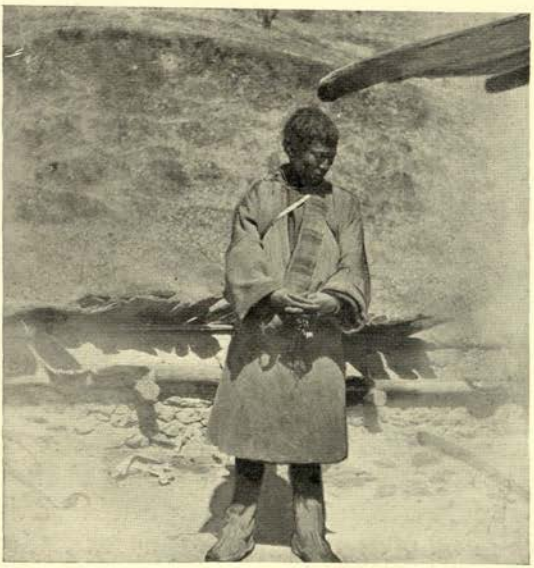
A very long bit of downhill brought us to the Mi-li River[1] which we crossed by an excellent wooden bridge which had only just been finished, the old bridge having been swept away by a flood. The river is here at an elevation of 7,500 feet. Its general width is some 60 yards; it has a strong current and is too deep to be fordable.

It was now getting dark and I wanted to halt for the night at some houses near the bridge; but I found we could get no fodder for our mules here, so we had to climb 2000 feet of very steep hill to Mi-li which we did not reach till eight in the evening. The guide, who had been most willing and useful since his thrashing, was sent on ahead, and found us a house to put up in with room for the mules underneath, so we got settled down pretty comfortably at last. It was a hard march of over twenty miles, and the

[1] Mr Amundsen gives Gya-yul Ch'u, "the river of China," as the Tibetan name of this stream. It seems probable that this is the same river that flows past Li-t'ang.



Mi-li



Photos by Major H. R. Davies

Mi-li villager

last steep climb entailed much dragging and coaxing of our tired-out mules.

Mi-li can scarcely be called a town, as it is practically nothing but a large monastery inhabited almost entirely by lamas and by men who work for the lamas. There are scarcely any genuine "black men" as the Tibetans call laymen. This expression, I believe, originates in the long black hair worn by the lay population, in contradistinction to the shaven heads of the monks.

A very picturesque place is Mi-li, with its well-built white houses, numbering perhaps a hundred separate buildings, situated on a steeply sloping hillside with fine woods overhanging it. The king's palace is a remarkably fine building, three storeys high, and measuring nearly 100 yards square, constructed of solid masonry, whitewashed all over the outside.

Coming from China into Tibet one cannot help being struck by the superiority of the houses of the Tibetans to those of the Chinese. The Tibetan villager erects a really solid building of stone and mud with woodwork of good massive beams, always two storeys and often three storeys high, a house that is evidently meant to last and which gives him and his family plenty of room. The Chinaman of the same class is usually content with what in comparison is a miserable shanty. The cold climate of Tibet no doubt makes a more substantial house necessary, and another reason for the contrast may be found in the tendency which the Chinese have even in villages to crowd together, so that there is no room for the building of more commodious houses.

I was not the first European to visit Mi-li, for Mr Amundsen[1], a Swedish missionary, had passed through here a year before on his way from Ta-chien-lu to Ta-li Fu. He entered the country with what one may call proper introductions, in the shape of passports from the Chinese officials and from the Tibetan ruler of Chia-la, the state of which Ta-chien-lu is the capital. He also halted some days on the Mi-li border to allow time for the news

[1] I believe M. Bonin also visited Mi-li in 1897. My road cuts the route taken by these two travellers almost at right angles, so that I did not have to go over trodden ground.

of his coming to reach the Mi-li officials. The consequence was that he met with no obstruction, and was on the whole treated with courtesy and helped on his journey[1]. I must also say in justice to the Mi-li officials that after I had arrived at the capital and satisfied them that I was neither a robber nor a gold-seeker, I had no further trouble of any sort. It was doubtless my sudden and unannounced appearance on their eastern frontier which caused me to be viewed with suspicion at first.

On the morning after our arrival, a crowd of people from the town turned up to have a look at the strangers and their property. A Tibetan crowd does not annoy one like a Chinese crowd. They are a better-mannered people than the Chinese and are satisfied with a look, without wanting to stand staring for hours.

Among the visitors was our lama friend of the day before. It appears he is a very big man in Mi-li, a sort of prime minister. He was fairly civil and gave me some tea and dried meat. I returned the compliment by presenting him with a bottle of salad oil. Directly he saw me coming towards him, he retired hastily out of sight into the stable, and when I followed him and gave him the bottle, he immediately hid it under his robe. He probably thought it was liquor, and was doubtless wofully disappointed when he opened it.

There are three or four Chinese traders living in Mi-li who say they came originally from the province of Shen-hsi. But they have become very much Tibetanised, and even speak Chinese with a Tibetan accent.

Chinamen are certainly not encouraged to settle in Mi-li. Mr Amundsen relates that a few years ago some Chinese came to wash for gold in Mi-li territory, but the Tibetan inhabitants in their zeal for the preservation of native industries, took the extreme protectionist measure of killing the intruders by rolling stones down the hillside on them. "Now," Mr Amundsen remarks, "none but Milians wash for gold!"

[1] Mr Amundsen gives an account of his journey in the *Geographical Journals* for June 1900 and November 1900.

CHAPTER XXXII

MI-LI TO CHUNG-TIEN.

The road to A-tun-tzŭ—Hot sunshine—Turns to snow and thunder—A camp in the forest—Caught in the snow—Reach a deserted hut—My Indian followers never complain—A downhill march—Forty miles of uninhabited country—Snow-blindness—A Tibetan bridge—Ran-da—An unpleasant camp in the snow—Our guides bolt—The path obliterated by snow—Guided to the road by a pagoda—A Tibetan reception at Ming-yu-ho—Closed doors—Alternative roads—A yak-grazing village—We are taken for robbers—But come to a friendly understanding—Breaking into Tibetan houses—An indefensible proceeding justified by results—Chung-tien—Its inhabitants—A priest-ridden country—Tibet unaffected by Chinese customs—Chinese absorption of other tribes—In Tibet Chinese become Tibetanised—Mandarins under the thumb of the lamas—Reasons for this—Buddhism and climate—The Chung-tien plain—A grazing country—A different race from the people of Mi-li—Their language the same as that of Lhasa—The word "Tibet."

I MADE many enquiries about the road from Mi-li to A-tun-tzŭ, and all my informants were agreed that it passed through Chung-tien. This no doubt is the usual road, but it makes a big circuit to the south. I should have much liked to strike off due west to try and find a more direct route, but I had to think of my engagement to meet Ryder and Manifold at the end of March. As it was, I was likely to be late, and could not risk embarking on a journey in which I might not improbably be brought up short by impassable snow or other obstacles.

So on the 20th March, the day after our arrival in Mi-li, we took the road to Chung-tien. Men and mules were thoroughly tired the day before, and I did not attempt to make an early start. We got off about eleven o'clock in hot sunshine, but an hour afterwards found ourselves climbing a hillside in a heavy storm of snow and thunder. Luckily it did not last long, and after crossing a 13,000 feet spur we reached a very pleasing camping ground on a

little stream in the middle of a beautiful forest, with abundant firewood and grass.

So far we had been very little troubled with bad weather, but we were now to experience the inconveniences of marching in snow. The next day we reached the top of the Ya-lung-Yangtze watershed at 15,300 feet. The snow already lay several inches deep, and in the afternoon it began to fall again with the accompaniment of a bitterly cold wind. The road still kept up on the ridge at an average height of 15,000 feet, and I persevered in hopes it would soon begin to descend and bring us into a warmer climate.

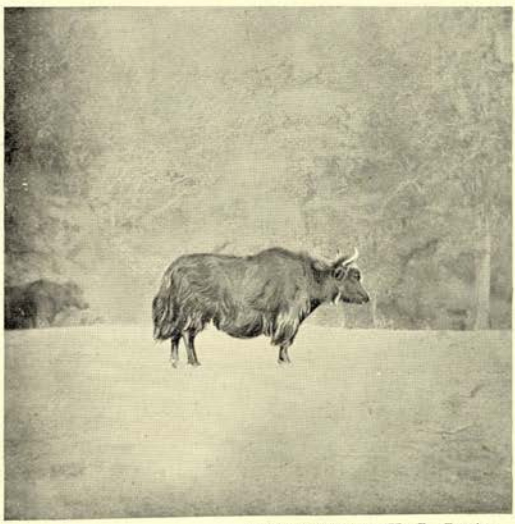
By six o'clock we had not got perceptibly lower, but luckily one of the guides knew of a deserted hut a little way off the path, and this we reached just at dark. The roof was full of holes, but there were dry corners to be found, and with this and two tents we all managed to get some sort of shelter. We were able to light fires and cook with melted snow, and the snow was not quite deep enough to prevent the mules grazing, so on the whole things might have been worse. My Indian followers, some of them men from the warmer parts of India, must have felt the cold keenly, but neither of cold nor of anything else did any of them ever complain.

Loading the mules with fingers numb from cold was rather a long operation the next morning, but once on the move things began to look more cheerful. In a couple of hours' marching we got out of the snow, and after 12 miles of continuous downhill reached Lei-lung, the first village we had seen since leaving Mi-li—an uninhabited stretch of nearly 40 miles.

The sun which shone brightly on our morning's march was very welcome after the dismal weather of the day before, but the glare which it caused from the snow had the unfortunate effect of giving several of my men snow-blindness. They suffered no pain from it, but everything looked dark to them. I had fortunately foreseen this contingency, and had in Yün-nan Fu bought several pairs of coloured spectacles which I now served out all round.

In sunny weather with snow on the ground it would be almost impossible to do a march in Tibet without some protection to the eyes. The Tibetans often use a sort of

The Mi-li lama prime minister



Photos by Major H. R. Davies

A tame yak

veil of horse-hair for this purpose, and they eagerly buy up the spectacles which Chinese traders occasionally bring in for sale. I once suffered slightly from snow-blindness myself, having imprudently started on a march without my coloured glasses. The effect was to make everything look purple, but it passed off after a few hours inside a house.

On the 23rd we still went on downhill, for a mile or two, to a river which here flows at the surprisingly low level of 6,200 feet. It is crossed by a bridge 50 yards long, made with layers of beams stuck out one over the other from both banks, with a span of planks in the middle, resting on the ends of these beams. This seems the common type of bridge in this part of the country, and I have seen several similar ones in Yün-nan. After passing the river, we crossed a spur and camped for the night at the little village of Tzŭ-lo.

The next day an unusually easy road brought us to Wei-jih, where with much difficulty I bought some maize for the mules and flour for the men. From here two roads branch off, both leading, they say, to Chung-tien. I took the more northerly of the two, as being the more likely to keep me longer on unsurveyed ground, away from Ryder's route from Yung-ning.

On the 25th we reached Ran-da, a very small village, where wheat was the only grain to be got for the mules. I should have halted here for the night if I had known what the road in front was like, but as not a soul in Ran-da knew a word of Chinese it was a little difficult to get information.

As it was, the day being still young, we pushed on. The next two miles entailed a climb of 2,750 feet, and at nightfall we found ourselves with exhausted mules forced to camp in a place so steep that one side of my tent was three feet higher than the other.

It began to snow soon after dark and went on steadily all night, so that there were several inches on the ground by daylight. The thermometer stood at 27° at seven o'clock in the morning—not extreme cold certainly, but quite enough to be very unpleasant when camping out in a snowstorm.

The two guides we had brought from Ran-da had had

enough of it, and did a bolt in the night. Luckily in this country there are not many roads to choose from, and we followed the only one there was. After we had gone a mile, the snow became so deep that all traces of the path disappeared. However, as the country was open grass we were able to strike straight across in what seemed the right direction, passing a large collection of wooden huts and cattle pens, now entirely deserted and probably only used in the summer.

Soon afterwards I spotted on top of the ridge one of the small stone pagodas, such as are often built by the road side in this country. This turned out to be the case here, and we soon found ourselves on the right track again. The top of the range was reached at 14,900 feet, and descending through thick woods we gradually got out of the snow, and reached the village of Ming-yu-ho where we were able to enjoy the real pleasure of being warm once more.

Here we met with the usual Tibetan reception. All the inhabitants locked their doors, and looking out at us from top-storey windows, shouted that we should find an excellent camping-ground two miles further on. However finding one or two men who knew some Chinese, we got on speaking terms with them, and pitched our tents in the village.

From Ming-yu-ho a road goes off northward which, they say, leads to Li-t'ang. I should much have liked to have followed it for a little distance, and then to have turned off westward straight for A-tun-tzŭ, but the necessity for my being up to time in meeting Ryder and Manifold prevented me from trying any experiments of this sort. Moreover my men were getting shoeless and my mules beginning to knock up, and I could not risk the not improbable contingency of being brought up by uninhabited snowy mountains.

Taking the road to Chung-tien, therefore, we crossed a high range and descended to Ta-lung, a yak-grazing village, with a hundred or more of these animals. There was a good deal of snow on the ground where we crossed the range, and very little more would have made it impassable. As it was, we had to unload our mules in one place, and carry the baggage for a short distance.

At Ta-lung they are evidently unaccustomed to strangers, and they apparently took us for thieves. The good man of the house stood at his door shouting out, over and over again, "I've got nothing here, I've got nothing here." He was ably seconded by his wife, who yelled out what I suppose was abuse with violent gesticulations. It was too cold to stand upon ceremony, so I walked into the house, trusting to things calming down when our involuntary host could be made to understand that we had not come to rob him.

The man contented himself with feeble protests, but the lady was in a most pugnacious mood and attacked one of my Chinese coolies with a broom. I had some difficulty in preventing him from retaliating with the legs of the plane-table—a very formidable weapon. At this moment another man turned up who proved more sensible and understood a little Chinese. Friendly relations were soon established, and while most of my followers settled down in the house we had forcibly occupied, I was shown another, quite new and unoccupied, where I was very comfortable. The thermometer fell to 17° at night and there was a bitter wind blowing. It would have been unpleasantly cold in tents.

I have several times found it necessary to force my way into Tibetan houses, and occasionally even to push the owner somewhat violently on one side. A quite indefensible proceeding no doubt, but circumstances alter cases, and I have always found it justified by complete success. After getting inside my followers and myself proceed to make ourselves at home and adopt an attitude of passive resistance to any suggestions that we are unwelcome guests. When our host realises that we do no harm and produce money to pay for anything he can sell us, he becomes gradually less and less sulky, and by the evening we are on the best of terms.

I have once or twice come back a second time to a house which we have entered in this high-handed fashion, and have been received in the most friendly way. In countries where might is right, it is a necessity to assert oneself sometimes. The alternative would be sleeping out in the cold and getting no supplies.

On the 28th March we reached Chung-tien after a march of nearly 20 miles over grass plains and low spurs, the first bit of level going we had had since leaving the Chien-ch'ang valley nearly a month before.

The town contains some 300 houses, and we found a sort of inn to put up in, kept by a Chinaman whose Tibetan wife plaited her red hair in seven pigtails. The inhabitants of the town are most of them of mixed Chinese and Tibetan descent. They dress like Chinamen, but usually speak Tibetan among themselves, though they can talk Chinese.

Chung-tien, or Che-tang to give the place its correct Tibetan name, is a town of the *t'ing* class, and there is a Chinese official of that rank here. But he has no real authority. The rulers of the country are to be found in the large monastery which is situated a little further along the plain on the road to A-tun-tzŭ. Here there are said to be 3,300 lamas. The taxation of the laymen to support the ecclesiastics is very heavy, and many families are leaving the district.

Everyone in Chung-tien, including the Chinese *chih-t'ing* is completely under the thumb of the lamas. I tried to hire a mule or two to ease my animals, but found it impossible to do so. The mule owners were quite willing, but they said that on their return they would certainly be beaten by the lamas for venturing to assist a foreigner. The Chung-tien lamas seem to be a truculent lot. Their demeanour when I passed the monastery the next day was certainly not friendly.

It is curious how little impression the civilisation and customs of the Chinese have produced on the Tibetans. Elsewhere, one of the principal characteristics of Chinese expansion is its power of absorbing other races. The greater part of the inhabitants of southern and western China are doubtless of aboriginal stock with a certain admixture of the real Chinese race. Yet the Chinaman of Yün-nan or Kuang-tung is thoroughly Chinese in his customs and ways of thought.

The process of absorption can still be seen actually going on in Yün-nan. I have found Lo-lo villages in all stages. It begins as a rule with the men learning to read Chinese, and adopting Chinese dress. Gradually they will

take to talking Chinese and to practising some of the Chinese religious observances. Then the women even will learn to speak Chinese, will wear Chinese dress and even bind their feet. Finally the Lo-lo language is gradually dropped, and the young men grow up knowing nothing but Chinese. This stage once arrived at, the transformation is nearly complete, and the next generation will probably indignantly deny their Lo-lo origin.

The same process goes on with Shan and other tribes, but in Tibet exactly the reverse takes place. The Chinese become Tibetanised, and the children of a Chinaman married to a Tibetan woman are usually brought up in the Tibetan religion and adopt Tibetan customs. In Tibet proper this is perhaps not surprising, as the country ruled by Lhasa is practically an independent kingdom and the Chinese have little influence there. But in places like Chung-tien and other districts well within China, it is somewhat astonishing to find a regularly appointed Chinese official submitting to the indignity of being a complete nonentity in the country he is supposed to rule.

I think the reason of this may be partly found in the enormous power that the lamas wield over the laymen. Forming, as they do, nearly half the male population they have all the authority in their hands, and it would be impossible for a Tibetan to conform to Chinese customs or religious observances without incurring their anger.

Another cause which keeps the Tibetan from being absorbed may be sought in the cold inhospitable nature of his country. There is nothing to tempt the Chinese to emigrate into Tibet, and consequently they are never in sufficient numbers to influence the Tibetans round them. A similar cause has preserved some of the low-lying Shan States from absorption, the heat in this case being the reason that Chinamen do not settle there.

Chung-tien stands in a large plain which at the time of our visit was very bare, as the snow had only just melted off it. A little later, when the warmth of the sun has had time to act on the soil, damp from melted snow, green grass springs up everywhere. The height of the plain is 11,800 feet, and it is too cold to grow rice or even maize: wheat is the chief crop.

But Chung-tien is essentially a grazing country. Everywhere one sees large herds and flocks of live stock—yaks, cattle, ponies, mules, sheep, and pigs. The breed of ponies is considered a good one, and mules and ponies are taken nearly every year to Bhamo for sale. Rice and sugar are the chief imports, brought in by Chinese traders from Ho-ch'ing Chou. No doubt the district would be very prosperous if it were not ground down by the lamas.

The natives of Chung-tien are of a different race from those of Mi-li. The latter belong to the semi-Tibetan family which it is convenient to call Hsi-fan. I was told that there were two different tribes in the Mi-li state, called K'a-mi and P'rü-mi respectively. The inhabitants of Chung-tien are of the genuine Tibetan race, who call themselves Pê or Pö. This in the written language is "b'ot" and is probably the last syllable of our word Tibet, the first syllable being the Tibetan word "teu" meaning "high" or "upper[1]."

A vocabulary that I took down at Chung-tien shows that the language of that district only differs in dialect from the Tibetan of Lhasa. The speech of Mi-li, on the contrary, though it contains some Tibetan words, is more nearly akin to the Lo-lo and to other Hsi-fan dialects.

[1] This is Desgodins' derivation, and Rockhill also agrees. Terrien de Lacouperie, however, derives "Tibet" from *Deba*, which means a ruler or king.

CHAPTER XXXIII

CHUNG-TIEN TO A-TUN-TZŬ.

News of Ryder—A country of swampy plains—The Yangtze at Pang-tzŭ-la ferry—Chinese hospitality—The Tung-ch'u-ling monastery—M. Renou's stay there in 1852—Meet Ryder—Pass blocked by snow—We tackle the pass—Difficulties of the mules—Mountain sickness—Reach A-tun-tzŭ—Its inhabitants—Arrival of Manifold—His journey—Surrounded by an angry mob at T'êng-yüeh—He is stopped by snow—His route up the Mekong valley—Halt at A-tun-tzŭ.

RYDER had passed through Chung-tien five days before, so I had to follow his route from here on to A-tun-tzŭ. Chung-tien is a country of somewhat swampy plains in which the flocks and herds graze, and our first march to T'an-tui was a nearly level one.

The second day ended with a considerable drop to Hsien-to which lies at 7,600 feet, and the third march brought us to the Yangtze at the ferry which is called Pung-dje-ra by the Tibetans, and Pang-tzŭ-la by the Chinese. The river here averages 100 yards in width and is evidently very deep. Its height above the sea level I made 7,100 feet. The ferry-boat is one of the best I have seen in western China: it will take 15 mules across at a trip.

The village, which is on the right bank, contains 60 or 70 houses scattered over the hillside in the usual Tibetan fashion. The Chinese military official was away at Ta-li Fu, but I was very comfortably put up by his clerk in a large house furnished in the Chinese style. After a month among Tibetans, it seemed almost like coming home again to be once more surrounded with chairs and tables, and to see the familiar Chinese scrolls on the walls and doors, and the little altar at one side of the room. It takes a little experience of the annoyances of Tibetan travel to make one appreciate Chinese hospitality.

The next day, the 1st April, we passed the monastery

of Nrui-da or Tung-ch'u-ling which lies away on the hillside to the left of the road. This is a notable place in the history of the French Mission, for it was here that M. Renou, the first missionary in this part of Tibet, passed ten months studying Tibetan in the year 1852. He lived disguised as a Chinese trader, and established most friendly relations with the principal lama.

We slept at Pê-kê and hardly had we started on the following morning when we met some of Ryder's mule-men on their way down to buy corn and straw. We learnt from them that his camp was a little way in front of us, and we soon reached it and found Ryder there.

He had arrived here a few days before, and finding the pass impracticable for animals, had gone on foot to A-tun-tzŭ, so as not to be late in our appointed meeting place. Finding neither Manifold nor myself there he had come back to get his mules over the pass.

We were camped here at 14,200 feet in about a foot of snow, but in this country there are curious thaws of patches of ground while there is deep snow elsewhere, so we were able to get fairly clear spaces for our tents.

The next day, the 3rd April, we tried the pass, and had a hard day's work. We started early so as to get over as much ground as possible while the snow was still frozen. Besides the main ridge there are two other big spurs to be crossed, so that it amounts to crossing three passes, the highest point being 15,500 feet. The snow was two or three feet deep, but was somewhat less in the actual path, as a Tibetan caravan had crossed the day before and trodden it down.

By midday it began to thaw, and my weak mules found considerable difficulty in getting along. They were constantly falling down, and we were all kept hard at work in undoing their loads and getting them on their legs again. To make it worse, we were at a height that made the slightest exertion painful owing to the difficulty of breathing. Several of our men got bad headaches from the rarified air. This mountain sickness I have usually found come on to a certain extent at 13,000 feet, but different passes seem to vary, and sometimes I have felt no bad effects even at 15,000 or 16,000 feet.

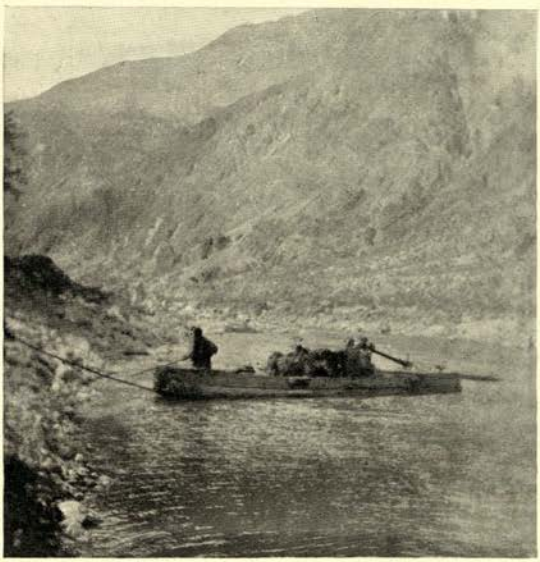


Photo by Major H. R. Davies

Pang-tzŭ-la ferry over the Yangtze

After doing nine miles I found it hopeless to try and get the mules any further, and left some of the men with tents and bedding to camp with the mules for the night. Ryder's animals had been hired from Yün-nan Fu and so were comparatively fresh, and he was able to get on to the proper camping ground.

I went on and slept in his tent and returned in the morning to look after the animals. One mule had died in the night. It had been weak for some time and had not been carrying anything, but on the previous day I had been obliged to give it a load of straw for the animals to eat. The men, too, though they had their tent and bedding, had suffered a good deal from cold. It was their own fault: they had neglected to get in firewood the evening before, though there was plenty of it not far off. We reached A-tun-tzŭ a little before dark and managed to stow ourselves and animals away in two small inns.

A-tun-tzŭ is not a very large place. There is a fair sized monastery, but besides this it hardly contains a hundred houses. It stands near the head of a narrow steeply-sloping valley surrounded by steep snow-covered hills. Its elevation above the sea we made 11,500 feet. The inhabitants of the town are many of them half Chinese, but the customs and language of the place are more Tibetan, though many of the people can talk Chinese as well[1].

Directly we arrived at A-tun-tzŭ a man came up with a letter which he had just brought in from Manifold, saying he expected to arrive in two or three days. He turned up on the 6th April, so we all met within six days of our appointed time. Manifold would have been here earlier but was delayed by circumstances.

Unluckily, as he was on the road from Bhamo to T'êng-yüeh, a collision took place in the Kachin Hills between the military police and some Chinese soldiers who had trespassed on our side of the border. The news of this had reached T'êng-yüeh, and Manifold when he arrived there found himself surrounded by an angry mob. One of his men was assaulted, several of his things stolen, and it required all the influence of the officials of the place to

[1] A-tun-tzŭ is said to have been almost entirely destroyed by a landslip since our visit.

prevent things becoming still more serious. To make matters worse his interpreter bolted.

A less determined traveller might well have been deterred from going on by such an unpleasant first experience of China, but Manifold was resolved to keep his appointment with us, and after four days' delay was able to continue his journey.

Arriving at Shih-ku[1] on the Yangtze without further obstacle he tried to take the route up the Yangtze valley which Gill had followed down.

There was, however, so much snow on the passes that he was obliged to give this up and make a circuit round to the south into the Mekong valley. It was by the road which runs up this river that he reached A-tun-tzŭ.

We halted a few days at A-tun-tzŭ getting information about the country and making arrangements for a fresh start. The weather continued cold. Snow would often fall in the night and would lie two or three inches deep in the morning, but the sun was strong enough to thaw it by the middle of the day.

[1] Lat. 26° 50′, long. 99° 55′.

CHAPTER XXXIV

THE MEKONG VALLEY ON THE TIBETAN BORDER.

Our plans—The source of the Irrawaddy—A route through Tibet to Assam—Difficulties of the journey—Hostility of Tsa-rong—Our proposed route—Superfluous men and baggage sent to Burma—Our party—Leave A-tun-tzŭ—The Mekong—A rope bridge—Method of crossing—Not so dangerous as it looks—Our bargain with the owner of the bridge—He repudiates it—But is brought to reason—Two passes between the Mekong and the Salween—Both reported impassable—We try the Lon-dre pass—Through forest—Difficulties of the path—Fallen trees—Rain—Deep snow—Impracticable for mules—We turn back—3½ miles in 8½ hours—Accident to our clothes—A landslip—Return to A-tun-tzŭ—Start for Ya-k'a-lo—Liu-t'ou-chiang—Up the Mekong valley—Steep mountains—Valleys of green fields—Fine snowy range—Tibetan houses—Ya-k'a-lo—Salt wells—Pères Bourdonnec and Grandjean.

My original idea, formed a year or two before, had been to find a route westward from A-tun-tzŭ to the sources of the eastern branch of the Irrawaddy, and thence get to either Assam or Burma through Kam-ti or by any other route that might prove feasible. Prince Henri d'Orléans' road lay about 60 miles to the south of where he places the head waters of the river, so that the actual position of the source of the Irrawaddy had still to be fixed, and there was likely to be much wild country in that direction which would be an interesting field for exploration.

However, a more useful and more difficult route was suggested to me by Prince Henri's remarks on p. 220 of the French edition of his book. This was to find a way through a piece of Tibet and the Mishmi country into Assam. Here is a road which when Tibet is open to foreign commerce, ought to become one of the most important trade routes for tea and other goods. Moreover, as far as the Tibetan portion goes, it would be quite untrodden ground. Whereas, in taking the Irrawaddy road, it would have been difficult to avoid going partly over the same country as that traversed in 1895 by Prince Henri and his companions Roux and Briffaud.

The difficulties of the road we proposed to take were no doubt great. Prince Henri would have liked to have tried it, but having with him no men on whom he could thoroughly rely, he abandoned the idea, and contented himself with a journey among tribes less hostile to foreigners than the Tibetans. It might have been well if we had followed his example, for as will subsequently be seen our attempts ended in failure.

The road we wished to take passes through a place called Men-kong on the Salween. This is a large monastery in the Tibetan state of Tsa-rong, the people of which have a bad reputation. There was little doubt that if we went straight for Men-kong by the ordinary route through Ya-k'a-lo, the Tsa-rong lamas would have plenty of notice of our coming, and we should find every obstacle placed in our way.

Our plan, therefore, was to start off in a southerly direction, cross the Mekong, and take Prince Henri's route through Lon-dre, giving out that we intended to follow in his footsteps to Kam-ti[1]. Once across the Salween we meant to turn up the right bank of that river to Men-kong. We hoped by our move southward to put the Tsa-rong people off their guard, and we should by taking this road at all events ensure the crossing of the two big rivers in places outside Tibetan territory.

For a journey such as we were embarking on it was very necessary that we should have no superfluous men or animals. Our interpreters, surveyors, Chinese plane-table coolies—in fact all unnecessary followers were therefore sent back to Burma, travelling down the Mekong valley, and thence, *viâ* Wei-hsi, Yün-lung, and Yung-ch'ang, to Bhamo.

We had orginally among us brought up ten Gurkhas from the military police at Myit-kyi-na, but one was left behind sick by Manifold at Yün-lung Chou with another to look after him. A third sepoy had been suffering from bronchitis, and had to go back with our surveyors. This reduced them to the seven who accompanied us—Havildar Kuluman Bhazur, Naik Seowlal Thapa, Maidan Singh, Rup

[1] Kam-ti lies near the head-waters of the Nam Kiu or Ma-li Hka, the western branch of the Irrawaddy.

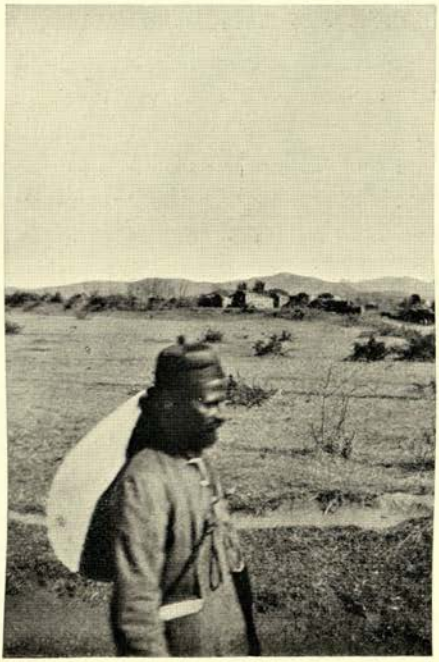


Photo by Captain W. A. Watts-Jones

Surveyor Lachman Jadu

Harkura, Doba Ram, Hastuman Bhazur, and Ranbir Thapa. Most useful these men proved in the difficulties that we encountered from bad roads and hostile Tibetans.

Our party, therefore, now consisted of our three selves, two Indian servants, seven Gurkhas, and three mule-drivers. One of the latter was Tibetan, and the other two were half Tibetan and half Chinese, who knowing both languages could act as interpreters. Ryder did the plane-table survey, and I took on my sextant to observe latitudes at night. We all marched on foot, our own ponies being used as baggage animals, of which we had eleven altogether. We could have done with less in a more inhabited country, but we were forced to provide for the contingency of having to carry a few days' supplies for man and beast.

By the 11th of April we were ready for a start and following down the A-tun-tzŭ stream to its mouth we slept on the banks of the Mekong at the village of Chia-pieh. This river is called Da Ch'u by the Tibetans. Its average width here is 60 or 70 yards, and its muddy waters run between steep mountain ranges with a very rapid current. Its height here is about 6000 feet.

Ten more miles down the Mekong valley the next day brought us to Yang-tsa where we had to cross the river and turn off westward. It was here that the party returning to Burma separated from us.

We were now to have our first experience of a Tibetan rope bridge. The rope, which is very thick and strong, is made of twisted bamboo. It is stretched across the river so that the end on the near side is much higher than the end on the far side. At each crossing place there are therefore necessarily two ropes, one to cross each way.

A piece of wood, about a foot long, hollowed out so as to fit on to the rope is placed on top of it. To each end of this piece of wood strong leather thongs are attached. The traveller is then tied into these thongs in a sitting position; they are passed up between his thighs, crossed over his chest and fastened off behind his neck. He is then let go and flies across the river at the speed of an express train. During the crossing the hands must be either placed over the piece of wood or must grasp the thongs near where they join the wood. If they touched the rope they would

be cut to pieces by the friction. The sagging of the rope at the further end makes it necessary to pull oneself along by the rope for the last few yards, but in a well constructed bridge this distance is reduced to a minimum.

Mules and baggage are sent across in exactly the same manner, and the whole crossing did not take longer than it would have done by a ferry. For the animals a special sling with more strongly made thongs is used. The thongs are brought round from underneath, one just behind the fore legs and one just in front of the hind legs, and are tied together and finished off over the back. The mule is then swung off his legs, and goes across with his back hunched up and all four legs hanging helplessly down.

The bridge was 100 yards long and the river running at a great depth below with a tremendous current, so that the crossing looked a very formidable undertaking to anyone with a weak head. But I was agreeably surprised to find it not half as bad as it looked. It was in fact not an unpleasant sensation, very much like tobogganning, but with a feeling of complete helplessness till the opposite bank was reached.

Our difficulties, in fact, were confined to the preliminary arrangements. First of all, of course, much time was wasted in bargaining as to what we were to pay. We finally came to an agreement on this point and paid over the money. No doubt what we gave was much more than the proper fare, and the head-man, encouraged by success, promptly repudiated the bargain and said he must have some more before they began work.

There was clearly only one way of getting across, so I hit him on the nose. Our followers joined in and after two or three Tibetans had been slightly injured, they became quite amenable and began to work well in getting us and our belongings across the river. Without this slight show of physical force we might have been there bargaining still.

The next day, the 13th of April, we crossed a big spur and reached Lon-dre. To the west of us lay the big mountain chain which separates the Mekong from the Salween. Two passes cross this part of the range, one going nearly due west, and the other crossing in a south-westerly direc-

tion. We should have liked to have taken the former route, but we were told it was quite impracticable so early in the year, and from the view of the snows that we got in that direction this seemed extremely probable.

On arriving at Lon-dre we were to receive further bad news, for the villagers told us that the south-western pass was also covered with deep snow and that loaded animals could not possibly get through. We were determined, however, to see for ourselves and arranged to go on the next day.

The Lon-dre people appeared fairly friendly, but we had considerable difficulty in getting a guide from them. In fact we had to take one by force in the face of violent opposition from the female portion of his family. However when he had gone a mile or two he became quite resigned to his fate and made himself extremely useful.

The difficulties of the road were considerable. It was a narrow path through jungle, partly bamboo and partly magnificent forest trees, a country more resembling the Shan States than China or Tibet. The road had evidently not been used for months, and in several places trees had fallen across it. If these were small they could be cut through, but otherwise a path had to be made round them. Our progress was therefore slow, and after doing 5½ miles in 8 hours we camped in the jungle at 10,000 feet.

The next day our difficulties were increased by a steady downpour of rain which made the steep path so slippery that our animals could scarcely keep their feet. We soon came to the snow, and struggled on through it for a quarter of a mile. Men could walk on top of it, but the loaded mules sank in at once and had to be unloaded and pulled on to their legs. They were down again almost as soon as they were up, and we could make no progress at all.

We walked on and reconnoitred ahead and found the pass got worse and worse—very steep ground and soft snow three feet deep. It was quite impossible to get the animals over this and we had to give it up. We got back to our old camp in the evening after doing 3½ miles in 8½ hours—a hard day's work, constantly lifting loads and carrying them over bad places.

The rain subsided into a drizzle in the evening and we

were able to light fires and dry our clothes, an operation that was not altogether successful as some of our things tumbled into the fire and got burnt. I had to do the rest of the journey with my knees showing through my knickerbockers and a large hole in my coat.

The next day we returned to Lon-dre in pouring rain and were very glad to get into a comfortable Tibetan house. In the middle of the night we were roused by a loud rumbling noise caused by a big landslip on the steep hillside on the other side of the stream on which Lon-dre is built. Tibetans sometimes get badly hurt by rocks rolling down the hillsides, and sites for houses have to be selected in places safe from landslips.

From Lon-dre we returned to A-tun-tzŭ by the same road we had come by. Our friends at the Yang-tsa rope bridge, with whom we had had the slight difference of opinion before, were extremely civil, and we had no difficulties this time. It poured steadily with rain day and night, and as we got towards the higher level of A-tun-tzŭ the rain turned to snow, and lay on the ground a few inches deep.

It was clear that we had arrived too early in the year to cross the passes leading westward, and our only course was to fill up the time as best we could till the snow melted. So after three days halt at A-tun-tzŭ, we started off again on the 23rd April, taking this time a northerly direction for Ya-k'a-lo.

About the middle of our first march we passed through the village of Dong. It is here that the direct road from Ba-t'ang, which Gill took, joins in. Beyond this we were on ground which, though often traversed by French missionaries, had never been surveyed.

The pass which separates A-tun-tzŭ from the Mekong is an easy one, and a long descent down a narrow valley brought us to that river at Liu-t'ou-chiang where there is a rope bridge on the direct road to Men-kong. The height of the Mekong here is 7,500 feet, so, if our observations are correct, there is a drop of 1,500 feet in the 20 miles between this point and Chia-pieh where we had previously struck the river[1].

[1] This difference of height seems too great to be likely. Probably our barometers and hypsometers were much affected by weather.

The name Liu-t'ou-chiang is Chinese, meaning "bridge-head river," for *liu-tzŭ* is the name by which they call the rope bridges.

For five more days our road lay up the valley of the Mekong, but the going was by no means flat. The hills on both sides of the river are very steep and full of landslips, the formation being loose shale. The path keeps up on the hillside, rising in places to 10,000 feet or more, and continually crossing bare brown-looking spurs.

Between these spurs are little side streams running down from the snow-covered tops of the range, and in these little valleys the villages are prettily situated, surrounded by green fields of wheat and barley, and by pear and peach trees which were then in blossom.

The Mekong runs for the most part between steep banks and there is practically no flat ground along it. To the west is a fine snowy range, the highest peaks of which Ryder made about 20,000 feet by observations with the long-shaped clinometer.

The Tibetan inhabitants of this valley appear well off and live in an excellent climate where it does not get extremely cold. Their houses are well built, often of three storeys, the ground floor solidly constructed of stone, and the two upper floors usually of wood. The roofs are flat, made of large beams covered over with mud, and the upper storeys are built so that they cover less space than the storey below them; thus part of the roof of one storey forms a terrace or verandah to the storey above it.

On the 28th of April we reached Ya-k'a-lo, a straggling village of 100 houses. The place is important because of its salt wells which supply all this part of the country.

On our second march out of A-tun-tzŭ we had already met one French missionary, Père Bourdonnec who was on his way to Tzŭ-ku (Tse-kou according to French orthography). At Ya-k'a-lo we were to have the pleasure of finding Père Grandjean who had come from Ba-t'ang to take Père Bourdonnec's place during his absence. He took much interest in our project of getting through to Assam, though he did not give us much hope of success. We are much indebted to him for the assistance and advice he was always so ready to give us.

CHAPTER XXXV

YA-K'A-LO TO BA-T'ANG.

Passes still blocked—Start for Ba-t'ang—Our mule-drivers bolt—They are replaced by Père Grandjean—Reasons for their flight—The Chia-la pass—Open rolling downs—A good shooting country—Eared pheasants—Blood pheasants—Hares and partridges—Shortness of cartridges—A freezing wind—Cold reception at Pa-mu-t'ang—Break into a house—And become good friends with the owner—Buttered tea—A dinner off turnips—A valley full of sheep—Pheasants and woodcock—The Yangtze again—Chu-pa-lung ferry—Ba-t'ang—The plain—The town and inhabitants—Chinese officials—The Tibetan chiefs—The French mission—Its destruction and re-establishment—Tibetan boots—A horse for two musical boxes and a pair of glasses—The climate of Ba-t'ang—Its crops—Its height—Manifold's operations for cataract.

RAIN continued to fall at intervals, and as rain in the valley would be snow on the hills, it was clearly useless to attempt the passes to the west for the present. We therefore determined to fill up the time by going to Ba-t'ang, especially as the first half of the road there had not been previously surveyed.

On the 30th April we left Ya-k'a-lo and made a short march by a gradual ascent up to La-ta-ting at 12,300 feet, just at the edge of the snow line at this time of year. The next day we halted to examine the pass in front of us, and finding it practicable we were preparing to climb it on the following morning. However at daylight the Gurkha havildar turned up with a long face to announce that the three mule-drivers had bolted in the night.

We sent off three Gurkhas at once to lie in wait on the A-tun-tzŭ road beyond Ya-k'a-lo, in hopes that the fugitives might stop a little at Ya-k'a-lo before going on. We soon afterwards started ourselves, but it was of course the easiest thing in the world for the mule-drivers to hide themselves, and we saw them no more.

Arrived at Ya-k'a-lo we went to the French mission. Père Grandjean could not suggest any way of capturing the runaways, but he offered to find three of his Christians as substitutes, and we were able to get back to La-ta-ting with them that evening. This was not the only kindly act of assistance that we received from Père Grandjean and his confrères on the Tibetan border. .

At first we were at a loss to explain the sudden flight of our men, but one of the mission people said that news had just arrived that Tibetan soldiers were waiting to stop us at the place on the Ba-t'ang route where a road branches off to Garthok. A caravan had arrived at La-ta-ting the night before, and doubtless our mule-men had heard this from them and decided to bolt, though as a matter of fact we had no intention of taking the Garthok road.

On the 3rd of May we left La-ta-ting and crossed the Chia-la pass, which, though it is 15,600 feet high, had only a few inches of snow on it. Sleeping at Hnga-tsa, we went on the next morning, crossing the Chiang-ka River, here 30 yards wide, by a knee deep ford at the village of Tsong-en. This is the point where the direct road from A-tun-tzŭ to Ba-t'ang joins in. From here a gradual ascent up a narrow barren valley brought us on to a plateau country at Chia-ni-ting.

On the 5th our road lay over open rolling downs rising to 14,500 feet. This is the best country for game that I have seen anywhere in western China. Large coveys of Eared Pheasants were constantly in sight. This is a magnificent bird as large as a goose, his whole body white with a dark green tail which looks black in the distance. He appears to live chiefly in the snow, or very near the snow line, and his loud harsh crow can be heard a mile off. He never flies if he can help it, but can make very good use of his legs, and so wary is he, that though we constantly saw them, we were never able to get within shot.

Another bird, more common if anything than the Eared Pheasant, is the Blood Pheasant. These birds also go about in large coveys, and have also the greatest objection to taking flight if they can possibly avoid it.

We found them chiefly in the woods just below the snow. Their general colour is a French grey very much like guinea fowl, but with some green feathers on the breast and sides, bright scarlet legs, and a fan-shaped tail with red feathers in it. This bird is not so wary as the other, and we shot a few, but they seem to be endowed with a wonderful capacity for carrying away shot.

Hares also were very plentiful here. They are a large kind, very much like the English hare, and much bigger than the Indian variety. Partridges I only saw once. This was near Tsong-en where I shot three out of a covey. They are the Sifan Partridge, and very much resemble the English bird on the back but are marked black and white on the breast.

We might have had really good sport here by beating the little valleys, but unfortunately we only had one gun among us and very few cartridges, so were obliged to confine ourselves to shooting for the pot.

A good deal of snow fell on this march, and it turned later on in the day into a regular blizzard with a piercingly cold wind which froze our faces and hands quite numb. We were glad therefore to descend a little from the bleak downs into the village of Pa-mu-t'ang[1]. Here we joined the main road from Lhasa to Peking, and from here to Ba-t'ang we followed in the footsteps of A. K., Gill, Bower, Rockhill, and Bonvalot.

It was near Pa-mu-t'ang a little way along the Lhasa road that the Tibetan soldiers were stationed to stop us, so the villagers not yet knowing which route we intended to take, naturally gave us rather a cold reception. Every door was locked, and we had to make a forcible entry. We picked out what seemed the best house, and Manifold was hoisted over the wall. Directly he landed in the court-yard inside, he was met by a huge Tibetan mastiff. These dogs are most formidable and are usually kept chained up, but this one had evidently been let loose for our benefit. Luckily the owner of the house had also come out when he found his wall being escaladed, and was induced to tie his dog up and to open the door.

[1] Called Bam-ding in Tibetan according to Rockhill. Marked in some maps as Bong-ting.

As usual, we soon became the best of friends with the people whose house we had so unceremoniously broken into. We were given a large room and regaled with buttered tea which we found excellent after our cold march. The combination of the hot tea and the caloric-producing butter is just the thing for a cold climate. After all there is nothing more incongruous in putting butter in tea than there is in putting milk in it.

The house was a very large one and the only obstacle to our comfort was the horrible smell of an enormous cauldron of the coarsest kind of turnip which the people of the house were cooking as a delicacy for their dinner.

Our next march lay along a pleasant grassy valley full of flocks of sheep. Passing K'on tzŭ-k'a[1] we crossed a little pass from which the Yangtze was visible, and descended a narrow valley to Te-ga-ting. The weather was bright and fine again and we saw a good deal of game, including some Stone's Pheasants (*Phasianus elegans*), and two woodcock, at one of which I made a disgraceful miss.

Continuing down the same valley the next morning we reached the Yangtze and followed up the bank of that river to the Chu-pa-lung[2] ferry where we crossed to its left bank. The Yangtze is here from 100 to 150 yards wide, running with a strong current through very barren hills. The ferry-boat is a fine one and will take 15 mules across at once. The Tibetan name of the Yangtze is Dre Ch'u according to Rockhill. As pronounced locally it sounded to me like Nri Ch'ö or Ndri Ch'ö. The Mekong they call Da Ch'ö, and the Salween Chiama Ngö Ch'ö. The elevation of Chu-pa-lung is only 9000 feet, and the shade temperature rose as high as 70°.

On the 8th May we reached Ba-t'ang. The distance from Chu-pa-lung is nearly 20 miles but the road is an easy one. The Ba-t'ang plain was the biggest I had seen since leaving Chung-tien a month before. It measures about two miles by one mile, and was beautifully green with crops of wheat and barley.

The town has some 200 houses, most of them of a good

[1] Rockhill's K'on-djin-k'a.
[2] Dru-ba-nang in Tibetan according to Rockhill.

size, and has some approach to regular streets in it. The monastery is a fine one and is said to contain 1800 lamas. The population of the place is chiefly Tibetan but there are a good many men of Chinese descent who have intermarried with the natives of the country and become Tibetanised.

There are three Chinese officials in the town, one civil and two military. The latter command the small garrison of 70 soldiers and are not men of any rank. The civil mandarin is called the *liang-t'ai* and is practically a commissariat officer, his duties being to collect supplies for Chinese officials passing along the road.

None of these Chinese officers have any jurisdiction except over the Chinamen living in the town. The government of the state is in the hands of a hereditary Tibetan chief who has under him a second chief, while the lamas, here as everywhere in Tibet, have considerable influence in affairs of state[1].

A French Catholic mission has been established here for many years, and the missionaries have passed through many vicissitudes. In 1881 Père Brieux was murdered a few miles from the town. The Tibetan authorities put the crime down to brigands, but there seems little doubt that the murder was instigated by the Ba-t'ang lamas. In 1887 there was an organised rising of the Tibetans, the mission stations at Ba-t'ang, Ya-k'a-lo, and A-tun-tzŭ were burned, and M. Brieux's grave was desecrated.

For some time the work of the missionaries was at a standstill, but after long negotiations, supported by the French Government, they obtained full compensation, and their houses were rebuilt for them. The Viceroy of Ssŭ-ch'uan can evidently exercise his authority here when he likes, though in ordinary circumstances the Tibetans are left very much to themselves.

We spent three days in Ba-t'ang, employing the time in buying boots for ourselves and in getting an extra transport animal or two. The boots that Tibetans habit-

[1] Owing to a rebellion which took place about 1904 things have changed considerably in Ba-t'ang. There is now a Chinese garrison there, and the monastery is said to have been destroyed.

Photo by Major H. R. Davies

The outskirts of Ba-t'ang

ually wear are made of felt and soled with leather. Our own boots were in a deplorable condition after 2000 miles of Chinese roads, and we were glad to be able to get such serviceable substitutes as the Tibetan article. They are not, however, altogether comfortable: the sole is so thin that every sharp little stone can be painfully felt through it.

We had brought with us some musical boxes and field glasses as presents to reward friendly individuals who might assist us in our travels, but we soon found that among Tibetans there was not the slightest prospect of finding anyone friendly enough to deserve a present. So we began to make use of these things in our horse dealing bargains. Two musical boxes and a pair of glasses was the price of a very nice pony we bought from one of the military mandarins.

The climate of Ba-t'ang we found extremely pleasant, very much like a hot summer day in England. During our stay the maximum temperature was 80° and the minimum 55°. The heat can never be very great in summer. Snow, they say, falls occasionally in winter but always thaws by the middle of the day. The place lies too high to cultivate rice, but wheat and barley grow well, and peach trees appear to thrive. We made the height 9,300 feet by both aneroid and boiling point thermometer. This is considerably higher than the observations of other travellers. Desgodins gives 8,065 feet, Rockhill 8,223 feet, Bower 8,500 feet, and Gill 8,546 feet[1].

The inhabitants of Ba-t'ang we found quite pleasant, and Manifold made them still more friendly by performing several operations for cataract. After the first patient—an old woman—had been successfully operated on and found she could see again, there was quite a run on Manifold's services and he restored the sight of seven people altogether. There was some danger that the patients would be too anxious to use their eyes again and would not keep them bandaged for the necessary four days, but we heard afterwards that all the operations were successful.

[1] Hosie, however, who has visited Ba-t'ang since we were there, makes the height 9,184 feet.

CHAPTER XXXVI

OUR ATTEMPT TO CROSS THE MEKONG.

Our plans for crossing the Mekong—From Ba-t'ang back to Ya-k'a-lo—The Da-ch'u rope bridge—Difficulties in getting slings—Manifold's successful stratagem—Cross the river—No slings for the mules—The bridge cut—Stoned by lamas—We retaliate with rifles—The lamas retire—A Gurkha badly hit—A disturbed night—A new plan for getting baggage across—The Tibetans collect to oppose us—And begin firing—Impossibility of getting mule slings—No means of getting mules across—No chance of getting through to Assam—Insurmountable physical difficulties—Forcible entry into Tibet not justified by our passports—The position of the French missionary—We are forced to give up our enterprise—Recross the Mekong—Difficulties of entering Tibet from this direction—The rivers form an insuperable obstacle—Stringent orders from Lhasa to allow no European to get through—Choice of routes—The Kam-ti route—The Salween route to Burma—We decide to go eastward to the Yangtze.

THE season was now advancing and we might soon expect that the passes to the west of the Mekong would be open, so after three days at Ba-t'ang we started back for Ya-k'a-lo.

Our plans were as follows. We meant to cross the Mekong at the Da-ch'u rope bridge close to Ya-k'a-lo, giving out that we were going back to A-tun-tzŭ by the road that leads down the right bank of the river and re-crosses at Liu-t'ou-chiang.

We had an excellent excuse for taking this route, as small-pox had just broken out in the villages on the left bank. Moreover at Da-ch'u both sides of the river are in Chinese territory, so we ought to have no difficulty in crossing there.

We hoped to cross on the 19th May, and having previously collected six days' rations for man and beast, we intended to start off by moonlight at 2 a.m. on the 20th, and by making long marches try and get well into the country before the Tibetans could collect to stop us.

On the 12th May we left Ba-t'ang and took the same

road we had come by, arriving at La-ta-ting on the 18th. We had engaged two fresh mule-men at Ba-t'ang, as we did not wish to take Père Grandjean's men into Tibet with us in case this should bring trouble on the mission.

Having got our supplies for six days, we marched to Ya-k'a-lo the next morning, and went on to the rope bridge which is two miles higher up the river. When we got there we found that the only house was on the other side of the Mekong. We shouted to them to bring the slings, but with no result. They had evidently had orders not to give them to us. It was now five o'clock in the evening, so we determined to go back to the village of Gön-ra to sleep the night, and take the opportunity of looking about for slings.

However, we had not got very far when we were called back to the bridge by shouts from Manifold. Thinking they would send the slings across to some yak-men who were on our side of the river, Manifold had hidden behind a rock and waited. His idea turned out a complete success, as two slings were sent across almost immediately, and by running up and threatening the yak drivers he was able to secure them. We all came back to the bridge, and Manifold and a Gurkha went across and sent us back two more slings which they found in the house on the other side.

We now had the means of getting men and baggage across, but unfortunately there were none of the larger slings that are necessary to cross mules. These were kept on the further bank in the village of Da-ch'u, a mile off up a steep hill.

By the time it was dark we had got a good many of our mule loads over, and our three selves with three Gurkhas and our two servants had also crossed to the further bank. But though the river is only 70 yards wide here, the current is too strong to swim animals over, and we were obliged to leave our mules with four Gurkhas to look after them on the left bank.

So far we had met with no more obstruction than is to be expected in any country inhabited by Tibetans; and, as both banks are here in Chinese territory, we did not anticipate any hostility.

However we were soon to be undeceived on this point. We had just settled down in the house on the river bank when the Gurkhas we had left behind on the other side shouted across that the rope had been cut. We all came out of the house and were met by about a dozen lamas coming up from the bridge. Their leader said something in a threatening tone of voice and they began to pick up stones. Now stone throwing as practised in eastern Tibet is not an affair of pebbles: they use big bits of rock and being very strong men they throw them in a way calculated to kill a man, if they hit him fair.

We shouted back to the three Gurkhas who were in the house on our side, and they came out with their rifles. The Tibetans had meanwhile begun stone throwing. We fired a shot over their heads and afterwards two more shots, and the Tibetans fired one shot in return and then disappeared.

We had all been hit with the stones but not badly except the Gurkha naik, Seowlal Thapa, who was struck on the forehead with a large stone and also got a shot pellet through his lip. The blow on the forehead went very near fracturing his skull and made him blind for 10 days afterwards. Manifold got hold of the leader at one time and we might have caught him if anyone else had seen what was going on, but by this time it was so dark that we could not see each other.

We went back into the house and for the rest of the night one of ourselves and one Gurkha did sentry. Small parties of men came up to the house two or three times, but apparently not the same men who had attacked us, as they walked up unconcernedly, and went away at once when we told them to do so.

We were up at daylight the next morning and got to work at a new plan we had for getting our things across. It happened that there were a lot of bags of salt in the house all done up with ropes. We undid these and tied them together to make a rope, long enough to reach across the river. The Tibetans had only cut the bridge by which we had crossed, and the other bridge from the right to the left bank was still intact. We hoped, therefore, with the aid of our long rope to drag men and animals across this

bridge. They could not cross without being dragged as the slope was the wrong way.

We were successful in getting some of the baggage across in this way and also one of the mule-men to act as interpreter. It seemed doubtful, however, whether the rope would be strong enough to drag the weight of a mule, while if the rope broke when the mule was in the middle, there might be considerable difficulty in ever getting him back to either bank. At all events, before we could even try the experiment, it was necessary to go to the village of Da-ch'u and try to get the mule slings.

However, about nine o'clock men began to collect all round on the hills which overlooked our house and also on the road leading down the Mekong. About 150 men were soon in position and they fired off 20 or 30 shots, probably more as a demonstration than with intent to hit us, as only one or two bullets came anywhere near. It was, therefore, quite evident that we should not be able to get the slings in a friendly way, nor should we be able to enter Tibet without fighting.

In going as far as Da-ch'u village to look for slings we should be quite within our rights as this place is in Chinese territory, but seeing the necessity of leaving a guard in the house with the wounded sepoy and the servants, and that our forces were split in two by the river, we should really have had no one left to go to the village with if the Tibetans made any resistance. Moreover, if we had been able to get to the village, it did not in the least follow that we should have succeeded in finding any slings,

Even if we had been successful in this, and had managed to get our mules across the river, we should have been scarcely any further advanced in getting through to Assam. All chance of getting well into Tibet before the inhabitants could collect to stop us was of course now quite out of the question. However badly armed and however unwarlike the Tibetans might be, it would scarcely be possible for us with eight rifles to march through the country if they were determined to stop us. Moreover, they had only to cut the rope bridges across the Salween and keep all boats on the opposite bank in order to defeat us even more effectually than they could have done by armed opposition.

The physical difficulties alone were therefore pretty well insurmountable, but we had also to consider the fact that we had no right to thrust ourselves into Tibet by force of arms. Our passports extended only to China, and our intention had been to pass through this corner of Tibet only if it could be done by peaceable means.

So far we had never left Chinese territory, and we had been attacked in country through which we had a perfect right to travel. Our action had been entirely in self-defence, and we had an excellent case against our Tibetan assailants. Had we crossed the border, however, in spite of Tibetan opposition, we should have been entering on an unjustifiable raid, and we could have hoped for no support from the British Government.

One more reason against going on I must mention. We had to consider the position of the solitary French priest at Ya-k'a-lo. He had helped us in more ways than one and we were bound to consider what effect our action might have on him. Had we fought our way into Tibet, might not the Tibetans very reasonably avenge themselves on the French mission? For the inhabitants of these wild regions have not yet got beyond the stage of counting all Europeans as belonging to one tribe[1].

To give up our enterprise at its very outset was a most unpleasant decision to have to take, but we were forced to recognise that under the circumstances it was unavoidable. In fact I do not believe that it is possible, under present circumstances, to enter Tibet from this direction.

The Tibetans, who became quite friendly directly we decided to recross the river, told us that the orders from Lhasa to prevent the entry of European travellers were so stringent, that they would sooner run any risk from fighting than disobey them. However this may be, it is quite certain that they can always put an effectual stop to any attempts to enter their country by cutting the bridges, as they did in our case[2].

[1] I do not mean it to be inferred from this that either M. Grandjean or M. Bourdonnec ever suggested that any action on our part would compromise them. But we were none the less bound to consider their position.

[2] It is interesting in the light of recent events to discuss the question of the courage of the Tibetans. A French missionary who had lived for years among

The Tibetans were probably much relieved when they learnt that we did not intend to go on. They came down and helped us to get our things across the bridge, and we recrossed and slept the night at Ya-k'a-lo.

We now had to consider what we should do next. The Lon-dre pass which we had tried in April would doubtless be open by this time, and by taking a route to the north of that of Prince Henri d'Orléans we might survey the sources of the eastern Irrawaddy and get as far as Kam-ti. But by that time the rains would have broken, and we should probably have had to stay there till October, as unbridged rivers would almost certainly prevent our getting through to Assam during the rains.

Another way would have been to go over the Lon-dre pass and then follow down the valley of the Salween to the neighbourhood of T'êng-yüeh. To do this we should have had to go back along a road already surveyed for eleven marches. Moreover the rainy season in Yün-nan was nearly due, and the Salwèen valley would doubtless become unhealthy, and its roads very likely prove impassable.

A third alternative was to turn eastward to the navigable part of the Yangtze, and so to Shanghai. This was the route we decided to take. The main road goes through Ba-t'ang, but to avoid known country as much as possible we determined to find a way through further to the south, and we eventually struck the main road near Li-t'ang.

them said to me "With fifty men you could march right through Tibet." I think most people who know them have gained this impression of their unwarlike character. An incident which occurred in the scuffle at the rope bridge led me to doubt the truth of this. A lama got hold of the muzzle of my rifle and would not let go though it was touching his body. I had only to pull the trigger to blow a large hole in his stomach. I was very unwilling to begin the killing, but might have had to fire to prevent his wresting the rifle from me, if Manifold had not pulled him off. In the fighting in 1904 the Tibetans seem to have shown no want of courage.

CHAPTER XXXVII

YA-K'A-LO TO YA-RA-GONG.

Turn eastward—Shoot a musk deer—Our mule-drivers bolt—A paralytic soldier—Our disagreement with the Tsong-en people—Now quite friendly—Get fresh drivers from them—They speak no Chinese—Communication by signs—The process of bargaining—Our food in Tibet—No vegetables—Tibetan milk pails never washed—Rancid butter and beesmeat—Tsamba—Indian rupees—No small change—Tea—Leave the Ba-t'ang road—Our highest point—Snowstorm—Our mules exhausted—Our camp—Death of two mules—A short march to rest the animals—Ya-ra-no—A corner of Yün-nan—The Yangtze at Go-nia ferry—Bargaining about the fare—A friendly lama—Strong current—The mules swim—Summer weather—Steep ascent—Camp in the jungle—Abandon our tents to ease the mules—Ruian Dzong-tza—Some flat ground—Ya-ra-gong—Père Soulié—His friendly relations with the Tibetans—The Troi-gön monastery—Manifold operates on a lama for cataract—A living Buddha—Present him with Christmas cards—Manifold doctors his warts—The district of Ya-ra-gong—The wounded Gurkha gets worse—His recovery.

On the 21st May we started on our eastward journey and went back for two days on our old road to Ba-t'ang, reaching Hnga-tsa on the 22nd.

On the second of these two marches I shot a musk deer under rather curious circumstances. While trying to stalk a covey of snow-cock, I heard the noise of some animal moving in the jungle, and a minute or two later a musk deer came out and galloped past me. I fired both barrels of my shot gun loaded with ball with no result, but on running after the deer to see if he was hit, I soon came right up to him struggling about in some snow, and was able to get close up and kill him. His two hind legs, it turned out, were fastened together by an old snare and this, combined with the deep snow had brought him to a complete standstill. Neither of my first two shots had hit him.

On the night we slept at Hnga-tsa, our two Ba-t'ang mule-drivers took the opportunity to bolt. They had

served us very well, and one of them had done all his marches with a badly ulcerated foot which would have stopped most men. However, they had evidently had enough of adventures, and did not care to follow us away from the main road which we were to leave the next day.

We had, from previous experience, anticipated that they might try and make off, and had fastened the court-yard door—the only entrance to the house—and put our Gurkhas to sleep in the doorway. But the muleteers had evidently made up their minds to go, and we found the marks where they had climbed from the roof of one of the outhouses over the wall, a sheer drop of 12 or 15 feet.

We felt a little stranded with no one who could speak any Chinese, but luckily at Tsong-en we found one of the Chinese soldiers who had come with us from Ba-t'ang. This warrior suffered from paralysis of one side of his face, and was such a wreck, that he could not do a day's march on foot, and had to commandeer a pony each morning from the village we slept in. Being unable to get a mount when we passed through Tsong-en on our march down, he had remained behind there and, finding the place comfortable, had made a prolonged stay.

On our way through Tsong-en before, we had had a difference of opinion with the villagers, arising really out of a misunderstanding about buying some things. However, as they took up stones and knocked one of our Gurkhas out of time with a rock in the stomach and smashed Manifold's wooden pistol case, we were obliged to retaliate with sticks and butt-ends and soon succeeded in dispersing them.

One might think that we should find Tsong-en a particularly hostile place after this, but on the contrary the villagers were evidently much impressed by the result of this encounter and were extremely pleasant and friendly. Consequently we had little difficulty, with the soldier as interpreter, in getting two men to go on with us as mule-drivers.

Neither of them could speak Chinese, so we took on the paralytic soldier to interpret, very much against his will. We kept a careful watch on him but he was too

many for us in the end, and the next morning just as we were starting he managed to hide himself somewhere and we wasted an hour in an unsuccessful search. His flight, however, did not make any difference to our Tsong-en muleteers who showed no disposition to bolt and stuck to us till we got fresh men at Ya-ra-gong.

Neither of these men could, however, speak or understand any Chinese, and as we were now off the main road we were in a country where the villagers knew no language but their own. No doubt our ignorance of Tibetan prevented us to a certain extent from getting information about the country, but it was wonderful how little difference it made in the ordinary affairs of life. With the knowledge of the Tibetan for a few common words such as "barley," "chicken," "egg," etc., and the help of signs we never had any difficulty in explaining ourselves.

The bargaining was always done with the help of the string of beads which nearly every Tibetan carries. If we were buying barley, for instance, I would take the rosary off the seller's neck and count off 30 beads and give it back to him, meaning that I expected to get 30 measures of barley for a rupee. The Tibetan would eye it with feigned amusement at the cheap rate at which I expected to get his corn, and would count off 12 beads. So it went on, each of us getting gradually nearer to the other's price till finally the bargain was struck. This process was amusing enough the first time, but when it had to be gone through almost daily for each separate thing we bought, it became decidedly tedious.

In the way of food we did pretty well in our Tibetan journey. Chickens and eggs were to be got in every village and we occasionally bought a sheep and divided it with our followers. Wheat flour was obtainable in any place of importance, and we always carried enough with us to make chupatties with.

Vegetables were the chief difficulty. The Tibetans do not grow anything of this sort except occasionally a coarse kind of turnip. We had to depend in fact on anything eatable that we could find growing wild. Nettles we got in many places and found them excellent—very like spinach. On one occasion we came across some wild onions and had

a great feast on them: in other places we got the villagers to pick for us the kinds of wild leaves which they knew to be edible.

Unlike the Chinese and Indo-Chinese races who never milk cows, the Tibetans are very fond of milk and butter, and these we were always able to buy. But Tibetan ideas of cleanliness are such as would horrify an English dairy farmer. The wooden buckets into which they milk the cows are *never* washed or cleaned in any way, and consequently the inside of them is thickly coated with a slimy white substance, the remains of the milk of years. The result of course is that directly the milk touches the bucket it turns sour. We were only able to get fresh milk by having the cows milked into our own cooking pots, but the butter made out of the Tibetans' milk was naturally very nasty. However, one gets used to anything, and the Tibetan climate gives one a healthy appetite. We soon resigned ourselves to eating our chupatties with rancid butter and with honey that was chiefly beesmeat.

The principal food of the Tibetans is "tsamba," which is made by roasting barley and then grinding it into flour. The Tibetan has only to mix a little of this with tea in the basin that he always carries in the breast of his coat, and he has a meal ready at once. We tried tsamba and found it excellent; we used to make it with hot water and eat it with milk like porridge.

The money used in this part of Tibet is the Indian rupee. They do not care about Chinese silver, and we converted all our silver into rupees at A-tun-tzŭ. Small change does not exist: there are no four anna or two anna pieces. So the Tibetans adopt the rough and ready expedient of chopping rupees into pieces with a big knife and a hammer. Besides rupees chopped some into three pieces, and some into four pieces, we also found it convenient to carry about some of the Chinese brick tea which is the universal beverage of Tibet. Tea is so indispensable to the Tibetans that the disc shaped "bricks" will pass current everywhere, and are often preferred to silver.

To return to our journey, we left the Ba-t'ang road at Tsong-en, and keeping down the bank of the Chiang-ka River we slept at the village of Bo-tsa.

The next day, the 24th May, our road led steeply up a very big range, reaching the top at 16,300 feet, the highest point that we touched in our Tibetan travels. It rained all the morning, and as we got higher up the pass, the rain changed to a heavy snowstorm with a bitterly cold wind.

Two of our animals were quite done up by the stiff climb and the rarity of the air. We had to shove and drag them along a few yards at a time even though they had no loads or saddles on. We got one just over the pass and the other nearly up to the top, but then both of them lay down quite exhausted, bleeding from the mouth. We did our best to lift them up, but nothing short of carrying them could have got them on, and eventually we were obliged to abandon them, leaving a feed of barley within reach of each of them.

Ryder had gone on ahead to choose a place for a camp, and we got in just after dark. It was 2000 feet below the top of the pass and the snowfall had not been so heavy, so with plenty of wood and water and tents pitched we were fairly comfortable. Our poor mules fared badly as all the grass was covered with snow and they got nothing but the corn we had carried for them.

Manifold went back up the pass again with some men early on the following morning to look for the two mules, but found both of them dead. At our camp the thermometer had only fallen to 28°, but no doubt it had been much colder at the top of the pass. The mules had nothing the matter with them but could not get on the day before owing to difficulty of breathing in the rare air, and presumably they died of the cold and exhaustion combined.

On the 25th we were obliged to do a short march to give our animals time to graze, so after going barely five miles we halted at the village of Ya-ra or Ya-ra-no, where we got good shelter for man and beast.

This place is the capital of a small Tibetan district which, we were surprised to learn, is in Yün-nan, a corner of which province apparently runs up northward into Ssŭ-ch'uan, being bounded on the west by the range we had crossed the previous day and on the east by the Yangtze River. The height of Ya-ra is 11,000 feet, and the weather was quite fine and warm again.

Photo by Major H. R. Davies

Tibetans at Ya-ra-no

On the following morning we crossed a spur and then had a long downhill march to the Yangtze River which we struck at Go-nia ferry. A long argument ensued, conducted by signs, as to the price we were to pay for being ferried across. In this we were much assisted by a young lama who was particularly friendly and obliging. The bargain was at last concluded, and we all got across in the course of the afternoon.

The process of crossing was rather a long one, as, though the river is not more than 100 yards wide, the current is so strong that the raft is carried down 300 yards before it can reach the opposite bank: it then has to be dragged up stream again by a rope before it can make the return journey.

Mules had to be swum across, as the somewhat shaky raft was not strong enough to take them. The mules of Yün-nan are used to swimming rivers, and are simply driven into the water in a mob, one of the drivers being previously sent across to call them. We were rather anxious on this occasion as the stream was strong and some of the animals weak: however, they all got over, though one of them only just managed it.

We camped in the sand and rocks of the river bed on the further bank. The height of the Yangtze is here 8,600 feet, so we were again in summer weather. The thermometer reached 87° in the shade in the daytime, and at night only fell to 62°.

Our road up from the river the next day led us by a very steep ascent, at first through bare country and afterwards through pleasant forest land. We passed the two straggling villages of Go-nia and Pi-te, and camped in the jungle near two little pools of water.

The steep hill had told on our animals again, and we decided to relieve them by leaving our tents behind. We still stuck to our waterproof sheets so as to give us some sort of shelter, but some of the nights we spent in the open after this were the reverse of pleasant.

The next morning, the 28th May, we crossed another pass which, though 15,000 feet high had no snow on it. From here we descended to Ruian Dzong-tza, a rather flourishing village of 30 houses, with a few fields of flat ground round it—a rare sight indeed in this country.

On the 29th an easy march up the side of a valley brought us to Ya-ra-gong. We put up in the village, and then went to the French mission station which lies a mile further on. The name of Père Soulié, the French priest here, was already familiar to us. He had in 1894 made a journey from Ta-chien-lu to Ya-k'a-lo through unexplored country, and had written an account of his travels for the Paris Geographical Society[1].

We halted two days in Ya-ra-gong, passing much of the time in the society of Père Soulié who has a great knowledge of this part of Tibet. He had been in Ya-ra-gong two or three years and had been occupied in building houses for himself and for the two families of Christian Tibetans that he had brought with him. He had also been negotiating for buying land: the Catholic missionaries usually do this so that they can settle down their converts in communities instead of having them scattered about.

The good father has established most friendly relations with all his neighbours, even with the lamas. These lamas belong to the red or old sect, whose members are always less hostile than are the yellow lamas of the reformed Tibetan church.

Manifold had several patients here, and on the second day of our halt we went with Père Soulié to the neighbouring monastery of Troi-gön where Manifold performed three operations for cataract, the patients being two old women and a lama.

The lamas were very civil and we went to see the *Tchreul-ko* or "Living Buddha." Most monasteries of importance are presided over by a *tchreul-ko*, who is selected when a child by the lamas as being a reincarnation of Buddha. He becomes an object of reverence to lamas and laymen, but does not necessarily take much part in the government of the monastery.

The "Living Buddha" at Troi-gön was a bright little boy of eleven years, who was allowed to have his sister brought up to the monastery every day to play with. I gave them some old Christmas cards which pleased them

[1] See *Bulletin de la Société de Géographie de Paris*, Vol. XVIII. Except his fellow-missionaries Père Soulié had seen no European since meeting Captain Bower in 1892. We were probably the last travellers he saw, as he was murdered by Tibetans in the rising of 1904.

much, and Manifold gave the little boy some medicine for warts on his fingers.

Ya-ra-gong is the name really of a district under Ba-t'ang and not of any particular village, but this village may be considered as the headquarters of the district, as Troi-gön, the principal monastery, which contains 300 lamas, is here. The height of the house we put up in (which is somewhat lower than the French mission) we made 11,900 feet. The climate at this time of year was very pleasant. Père Soulié told us there was a rainy season beginning in June but that the rain is not very heavy or continuous.

We stayed at Ya-ra-gong rather longer than we intended as the Gurkha naik who had been hit by a stone at the Mekong bridge was not going on very well. He had a good deal of fever and his head began to swell again. However, two days' rest did him a lot of good and he soon afterwards made a good recovery.

CHAPTER XXXVIII

YA-RA-GONG TO LI-T'ANG.

New mule-driver from Père Soulié—Rhododendrons—Shelter in a shepherd's hut—A wooded valley—Den-bo-nong—High range—Snow at night—Inadequate shelters—A pony breaks down—A wolf—Nomad shepherds—Cream cheeses—Camp under a rock—Steady drip of melted snow—A miserable night—A fine morning—Chong-tsa-gong—The pleasures of sleeping in a house—Reach the main road at Ra-nong—Wooded valley full of pheasants—Bleak granite plateau—Sleep in a yak-shed—A cold march to T'ou-t'ang—Fording the Li-t'ang River—A sad accident—Ranbir Thapa drowned—Impossibility of helping him—Efforts of Ryder and Manifold to get his body—A dangerously strong current—Li-t'ang—An uncultivated plain—Nomad camps—The town—The monastery—Anti-foreign lamas—Three French missionaries—News of Kimberley and Ladysmith.

On the 1st June we left Ya-ra-gong for Li-t'ang. Our two Tsong-en mule-drivers returned home, and Père Soulié kindly gave us one of his Christians to take their place. He knew no Chinese unfortunately, but he was an excellent worker and we were sorry to part with him when he left us at Li-t'ang.

After crossing the little Ya-ra-gong River we had a steep bit of uphill over a pass at 14,000 feet. From here we marched down a narrow valley covered with fir trees and rhododendron bushes. The latter were only just coming out into flower, though in the milder climate of southern Yün-nan they flower in February. It rained most of the day, and as we had thrown away our tents we expected to have to pass an unpleasant night. However, luckily we came on two shepherds' huts, so that we all got under good cover.

The next day we went on downhill to a little river, and followed its right bank down through beautiful forests of fir, cedar, birch, ilex, walnut, and other trees. At the end of the march we crossed the river by a wooden bridge to

the village of Den-bo-nong, where we put up in the house of a man whom Père Soulié had spoken of as the rich man of the district: in spite of his wealth we found he could drive a very stiff bargain for anything he had to sell.

The next day, the 3rd June, our road turned somewhat abruptly in a northerly direction, reaching the broad top of a range by a very steep climb, the highest point being 16,000 feet.

We found a fairly sheltered camp in a little valley at 15,300 feet, and rigged up shelters with waterproof sheets. These were all right as long as it was fine, but were only moderately effective against the snow which began to fall at midnight and went steadily on. By doubling ourselves up in the middle of our beds we kept fairly dry, but all clothes we were not actually wearing were soaked.

The thermometer was down to freezing and snow still falling heavily when we got up on the 4th June soon after four o'clock. One of our ponies had given way the day before and had finally fallen down the hillside into some rhododendron jungle, from which we could not move him. So I started back in the early morning with two men to see if he was still alive.

We saw a wolf as we went back up the hill, but he was very wary and gave no chance of a shot. This was the only one we came across in Tibet, though I fancy they are fairly common. To our surprise we found the pony on his legs and brought him on, but in the afternoon, though carrying no load, he again broke down and had to be left with some nomad shepherds.

We caught up Ryder and Manifold at the midday halt in a well-watered valley, full of good grazing ground, on which were the ragged-looking tents of several nomad encampments. We entered into conversation with some of these wandering shepherds—at least as well as a total ignorance of each other's language would allow—and bought some cream cheeses from them. These were rancid, not to say rotten, but they formed a little variety in our somewhat monotonous diet.

Going on up this valley in steady rain we came at about three o'clock to a large overhanging rock, under which some shelter could be got. As the rain was just

turning to snow we decided to halt there for the night. A rather miserable night it proved. Our firewood was too wet to be of much use for cooking, and the rock being limestone soon started a steady drip of melted snow. We slept with blankets over our faces to keep the drip off, and woke up in the morning with our beds covered with pools of ice-cold water.

The next morning was fine and with the sun shining and some hard walking we were able to get the circulation back into our chilled limbs. After crossing a range we descended a narrow wooded valley and eventually got to a river 40 yards wide, whose bank we followed up to Chong-tsa-gong, the first village we had seen for three days. It was indeed a pleasure to sleep in a house again after our experiences of the last two nights in the open.

The next day we followed up the same river, crossing it at Nren-da, and reaching Ra-nong[1] in the afternoon. Here we were on the Ba-t'ang-Li-t'ang road, and from here on to Ta-chien-lu we followed the main road along which several other travellers had preceded us.

Our road of the 7th took us up a pleasant wooded valley full of the large white Eared Pheasants, whose loud crowing could be heard for a long distance. We got gradually up on to a high-lying bleak grassy plateau, with rocky granite hills rising out of it. In the afternoon it came on to hail, and we were glad to find shelter in a solitary mud house called Ndzon-dza[2] into which we all managed to fit.

We ourselves slept in the yak-shed, which was built in the form of a verandah to the house. It was rather cold and smelt, but we found it lighter and less smoky than the solitary room of the house. The height of Ndzon-dza is 15,000 feet, and as it snowed at night and our roof was not water-tight, we woke up with our beds in pools of cold black-coloured water.

Marching through snow the next morning we passed a small lake, on which was a solitary pair of merganser, and ascended the Go-ra-la pass, 16,000 feet[3]. A very bleak,

[1] Called La-ma-ya by the Chinese.
[2] Rockhill's *Tsung-ta.*
[3] 15,753 feet according to Gill.

rocky, cold-looking country here, with no cultivation or population. The day was miserably cold with incessant rain, sleet, and snow, so after going about nine miles we put up at the Chinese post-house of T'ou-t'ang[1]. The roof was fairly water-tight—at least it did not leak everywhere.

On the 9th of June an easy march through a grass country full of hares brought us to Li-t'ang. On this day a sad accident occurred, by which one of our Gurkhas, Ranbir Thapa, lost his life.

The bridge across the Li-t'ang River was broken, so we had to ford it a little below. I had just seen three Tibetans cross it, so knew it was fordable. The river is about 50 yards wide and three feet deep, with a strong current, but by fording it cross-wise, half up stream, and walking slowly one could manage to keep one's legs.

Unfortunately Ranbir Thapa tried to help himself across by holding on to a mule's tail. The mule crossed quite straight, and when near the opposite bank got swept off his legs. Had the sepoy kept his hold on the animal's tail it would have been all right as the mule got to the shore, but he unfortunately let go. The current was very strong, and having once lost his feet he was carried down at a tremendous pace and very soon sank.

Only two men had by this time got to the further bank. The rest of us were still in the middle of the stream, helpless spectators of what was going on, as the current was so strong that we could only move at the very slowest pace. But even if every one had been on the other bank, I doubt if he could have been saved in such a strong stream.

When we got to the shore we ran down the bank and found his body caught up in a shallow place 300 yards below. By this time it was at least ten minutes since he had first sunk, and as his face was still under water, he must have been dead.

However, Ryder and Manifold, with a rope made out of a turban and a cummer-bund tied round them, at considerable risk to themselves, crossed the bit of strong current that separated us from where the Gurkha was lying. When they got there, the water was shallower and

[1] Jambut'ong in Tibetan according to Rockhill.

they were able to stand without difficulty and to tie the rope to the body, but as we were pulling it across the rope broke and the body was again carried away.

We tied a stone to the rope and threw it across again to Ryder and Manifold, who got back to the shore in safety. We looked down stream some way but saw no more of the unfortunate Gurkha, and next morning Manifold with two men searched the river for several miles but was equally unsuccessful.

It was a sad business so near the end of our journey and we felt much depressed over it. It is, I am glad to say, the only time in my travels that any of my followers have met with any serious accident.

Li-t'ang stands in a plain 15 miles long and five miles across at the widest part, but not an inch of it is cultivated. The whole is covered with grass, on which are many encampments of nomads with large herds of yaks and sheep. All grain and rice has to be brought from a distance. The height at the town we made 13,800 feet, a higher estimate than that given by other travellers[1].

The town contains some 300 houses, of which, at least, half are inhabited by Chinese or half-Chinese who have most of them been born here and have become very much Tibetanised, though they can all speak Chinese as well as Tibetan.

At one end of the town is a very large monastery, which is said to contain 3,700 lamas. As elsewhere in Tibet, the lamas are all-powerful, and the small Chinese official dare do nothing without their approval.

In Li-t'ang they are a particularly anti-foreign lot, and on the following day the head lama sent a message to us to say that he was not at all pleased at our coming, and that we must leave Li-t'ang that day. This we refused to do, and he then sent orders that no one was to sell us anything. However, the trading instincts of the Chinese were too strong to make this order effective. They dared not bring us anything openly, but at night after dark we got everything we wanted.

On our arrival at Li-t'ang we found three French

[1] Rockhill gives 12,914 feet: Hosie, 13,234 feet: Gill, 13,280 feet: Potosi, 13,330 feet: A. K., 13,400 feet.

missionaries—Père Villesèche and two others—who had just come in from the opposite direction. All three were young men just out from France. One was on his way to Tzŭ-ku (Tse-kou) on the Mekong, another to the newly established mission station in the Salween valley, and the third to Ya-k'a-lo.

They brought us news of the relief of Kimberley and Ladysmith and the occupation of Bloemfontein. This was nearly three months old, but for us it was quite the latest intelligence. Our last news before this had been what Manifold brought us to A-tun-tzŭ in April about Spion Kop.

CHAPTER XXXIX

LI-T'ANG TO YA-CHOU FU *VIÂ* TA-CHIEN-LU.

Ho-ch'u-k'a—Gold washing—Hard frost in June—Hsi-ngo-lo—Cultivation again—Yak-loads of gunpowder for Lhasa—A stag's head—The Ya-lung at Ho-k'ou—A more Chinese country—Tung-ngo-lo—Mr Amundsen—Sell our mules—A level road—Green country—Ta-chien-lu—Its inhabitants—Missionaries English and French—Trade of Ta-chien-lu—Tea trade—Mr de Rosthorn's pamphlet—Enormous weights carried by coolies—Down the T'ung River—A short cut from Lu-ting-ch'iao—Well cultivated country—Ya-chou Fu—Mr Upcraft—End of our land journey.

ON the 11th of June we left Li-t'ang and crossing the watershed between the Li-t'ang River and the Ya-lung by an easy pass we reached Ho-ch'u-k'a. The population of this village consists of 20 Chinese soldiers, who were very civil, as Chinamen always are in Tibet.

The last part of our march followed down a stream in which there was a lot of gold-washing going on. They build a wall or embankment so as to partially divert the course of the stream, and then dig up the sand in the part of the bed thus left dry. The sand is then washed on the system usually employed in western China. They pour the sand and water down a slanting wooden shoot, at the lower edge of which is a slight ledge sticking up. The sand containing the gold being heavier than the rest sinks in its passage down the shoot and gets caught by the ledge.

There was a hard frost the next morning, the 12th June, and even small streams of running water were frozen over. We crossed two spurs both well over 15,000 feet and descended to Tsa-ma-lu-t'ung[1], a Chinese post of three houses beautifully situated in a narrow valley with steep forest-clad hills rising up from it on each side.

[1] Tsa-ma-ra-dong in Tibetan (*Rockhill*).

Crossing another range the next day we descended to Hsi-ngo-lo, a scattered village in a small cultivated valley—the first fields we had seen since Ra-nong. All the country on both sides of Li-t'ang that we had been passing through was high-lying grass land with occasional nomad camps and herds of tame yaks[1].

The height of Hsi-ngo-lo we made 12,000 feet, which agrees with Rockhill's determination. As a rule our heights are greater than Rockhill's, but correspond fairly well with Gill's.

On the 14th a stiff climb brought us on to an open grassy range at 15,000 feet, from which we descended a wooded valley to Ma-kê-tsung[2]. In the same village was sleeping a Chinese captain who was escorting 70 yak-loads of gunpowder to Lhasa.

Our road on the following day led us steeply downhill through a fine forest country to the Ya-lung River. There is probably some shooting to be got in this valley. In the house we slept in at Ma-kê-tsung was a good stag's head with points all up his horns, like the Kashmir stag. I imagine it to be Thorold's Deer (*Cervus albirostris*).

We crossed the Ya-lung (called Nya Ch'u by the Tibetans) in a large ferry-boat to the village of Ho-k'ou[3]. The river is here 80 yards wide with a very strong current, but backwaters near each bank assist the boat in crossing. The height we made 9,400 feet[4], and we found the climate quite hot, the thermometer reaching 87° in the shade.

Ho-k'ou is inhabited chiefly by Chinamen, and from here onwards the country becomes more Chinese. The Ya-lung River here forms the boundary between the state of Chia-la (Ta-chien-lu) and Li-t'ang, and it is only since 1703 that the *direct* rule of China has extended across this river.

Ascending a narrow valley through a fine forest country we reached Wo-lung-shih on the 16th, and on the 17th crossing a pass 15,400 feet high we descended into a well

[1] There are no wild yaks in this part of Tibet.

[2] Ma-gan-drong in Tibetan (*Rockhill*).

[3] Also called Chung-tu, and known to the Tibetans as Nya-ch'u-k'a.

[4] A.K. gives it as 8,410 feet; Rockhill as 8,518 feet; Hosie as 9,010 feet; and Gill as 9,222 feet.

cultivated valley in which lies the straggling village of Tung-ngo-lo.

Here we found Mr Amundsen of the China Inland Mission whom I had met at Ta-li Fu in a previous journey. He had since then married and was now installed with Mrs Amundsen at Tung-ngo-lo. I have mentioned before his journey made in 1898 from Ta-chien-lu through Mi-li to Ta-li Fu.

We were now nearing a part of Ssŭ-ch'uan where baggage is usually carried by coolies, and pack animals are little used. Luckily we received an offer for our mules at Tung-ngo-lo, and we were glad to sell them, the purchaser undertaking to find animals for us to take our baggage as far as Ta-chien-lu.

These arrangements were quickly made, and we were able to push on again the next day. The march was a level one—an extraordinary circumstance indeed—our road leading down one valley and up another through a splendidly green country, partly grass and partly cultivated with wheat and barley.

We slept at Chang-k'o, near Ania, and the next day crossing the Gi-la Pass (15,000 feet) by a gradually rising path, we descended to Chê-to where we found a fairly good Chinese inn.

On the 20th June a short march down a narrow, very green valley brought us to Ta-chien-lu, or, as the Tibetans call it, Tar-chen-do. The town contains 800 houses and is shut closely into a narrow valley by high steep hills, the Chen River which is crossed by a bridge dividing the town into two parts. This is the end of Tibet, and the town looks more Chinese than Tibetan, though one sees a good many lamas in the place, and most of the Chinamen living here can talk Tibetan as well as their own language. In spite of its rather Chinese appearance, Ta-chien-lu is the capital of the Tibetan state of Chia-la.

We were surprised to find an excellent inn here, quite the best I have seen anywhere in China. We spent most of the day with the English missionaries, of whom there were four, though only one, Mr C. Polhill-Turner, was stationed here permanently.

He and I were old schoolfellows, though we had never

The bows of a Yangtze boat

Photos by Captain W. A. Watts-Jones

Towing boats up the Yangtze gorges

Plate LX

known each other at Eton, for he was in the eleven while I was still a "lower boy" and would not have dared to address one who had attained such a distinguished position. After a few years in a cavalry regiment, he had thrown up his commission and come out to China as a missionary.

Two of the others whom we met were contemplating a journey further in to Tibet and hoped to establish a mission station at Ba-t'ang.

We also went to see Mgr Giraudeau, the Bishop of the French Tibetan mission, and thanked him for the many kindnesses we had received from the French missionaries.

Ta-chien-lu is the great trading mart of eastern Tibet. Furs, medicine, and musk are the exports to China, and tea is the principal import into Tibet. The amount of tea drunk in Tibet must be very large for the size of the population, for everyone, however poor, drinks it constantly, in fact at every meal. A certain quantity of P'u-êrh tea is imported from Yün-nan, but by far the greater part of the tea for Tibet passes through Ta-chien-lu.

It is grown in western Ssŭ-ch'uan chiefly in the Ya-chou Fu district. All that is imported into Tibet is of a very coarse quality and is largely adulterated with sticks. The cost of carriage to distant parts of Tibet is so large that a good quality of tea could be sold there only at a prohibitive cost.

Mr A. de Rosthorn has published a pamphlet[1] on the subject of the tea trade and this probably contains the most accurate information available. He estimates the weight of the annual import through Ta-chien-lu as 108,780 piculs, which comes to fourteen and a half million English pounds.

He discusses the question of whether tea can ever be profitably imported from Assam into Tibet, but comes to the conclusion that the Chinese tea, adulterated as it is with 65 per cent. of twigs and leaves of other plants, and sold at Ba-t'ang at 5½*d.* and at Lhasa at 11*d.* a pound will continue to hold its own, except possibly in parts of Tibet very remote from China.

[1] *On the Tea Cultivation in Western Ssŭ-ch'uan*, by A. de Rosthorn. London, Luzac & Co., 1895.

The height of Ta-chien-lu we made 8,400 feet, which agrees well enough with the observations of other travellers.

We made no halt here but left again on the 21st, our things carried by coolies who having brought up heavy loads of tea made nothing of our light baggage. The weight the tea coolies carry is enormous. The ordinary load is about nine of the long shaped bundles: this would amount to from 190 to 215 lbs. But many coolies carry much more than this, and I saw two different men who were carrying seventeen. This, according to de Rosthorn's computation of the weight, would be at the very least 363 lbs.

It seems almost incredible that a man could do a hilly day's march with this weight on his back unless one has actually seen it. And yet the men are not particularly big nor do they look extraordinarily strong: they begin as children, and no doubt that has much to do with their ability to carry these huge loads.

If one loaded a mule as heavily he would undoubtedly break down. Mules are occasionally seen with a load of tea on them, but it is an accepted fact that the animal's load has to be much lighter than what would be carried by a man.

Our road followed down the right bank of the swift rocky river which is formed by the junction of the Tar and the Chen. This runs into the T'ung River or Yü-t'ung Ho as we found it called locally, and on the 22nd we kept down the bank of this latter river by an up and down road till we crossed it by an iron-chain suspension bridge into Lu-ting-ch'iao.

From here the main road makes a considerable circuit to the south, so we took a more direct mountain path which is said to save two days but is too steep for animals. The path led back up the left bank of the T'ung River for a short distance, and then turning off up a side valley with a very steep climb at the end of it, crossed the Ma-an-shan pass at 10,000 feet. This is more than 5000 feet above Lu-ting-ch'iao, for since leaving Ta-chien-lu we had got down to lower levels again.

It took us three long days altogether to cross the hilly country which separates Lu-ting-ch'iao from T'ien-ch'üan

Chou which we reached on the 25th June. This was the first real Chinese town I had seen since leaving Mien-ning early in March.

A long hot march of 20 miles, crossing the Ya River twice by ferry, brought us into Ya-chou the next day. We were now in a well populated and thoroughly Chinese country. The hillsides right up to the top were covered with fields of maize, and every bit of ground capable of being irrigated was cultivated with rice.

Ya-chou is a pleasant town with a very friendly population, and we were hospitably put up by Mr and Mrs Upcraft of the American Baptist Mission. Mr Upcraft seemed to have made friends with everyone in the town, and walking through the streets with him he was continually greeted by all classes from mandarins to beggars.

We were now on the banks of the Ya River and were therefore in communication with Shanghai by water. Our long land journey was at an end, and we were not sorry to do the rest of our travels by boat, for so many months of walking up and down hill had made us somewhat stale. Since leaving Burma in November I had done 2,442 miles, and Ryder had done over 2,500.

CHAPTER XL

YA-CHOU FU TO SHANGHAI.

By raft down the Ya River—Chia-ting Fu—Dr Hart and Dr Hare—News of taking of Ta-ku Forts—By boat to Ch'ung-k'ing—News of Admiral Seymour's expedition—Its possible effect on the Chinese—The scattered European community of Ch'ung-k'ing—The Consul's warnings to British subjects—By boat down the rapids—I-ch'ang—End of our travels.

OUR journey from Ya-chou Fu to Chia-ting Fu was made by raft. The Ya River is full of rapids and shallows, so is not navigated by boats. The rafts, made of several layers of bamboo, though they occasionally get water over them, cannot sink and are able to do the down-stream journey much more quickly than it could be made by land. Arrived at Chia-ting the owner breaks up his raft, and sells the bamboos of which it is constructed.

We got a raft which held us and our followers comfortably, while the raised portion in the middle saved men and baggage from frequent wettings at the rapids. Leaving on the 28th June we reached Chia-ting early on the following morning. Navigation is not possible at night, so we tied up in the evening at the little town of Chia-chiang-Hsien. It took us altogether fourteen hours of actual rowing to get to Chia-ting. By land it would have been a journey of four days.

At Chia-ting we found Dr Hare of the Canadian Mission whom I had previously met in Yüeh-hsi. He and Dr Hart of the same mission kindly took us into their house, and gave us much assistance in our preparations for our boat journey.

We were anxious to get on now, so left Chia-ting again the next day. Just before starting a telegram arrived forwarded by raft from Ya-chou by Mr Upcraft giving us the

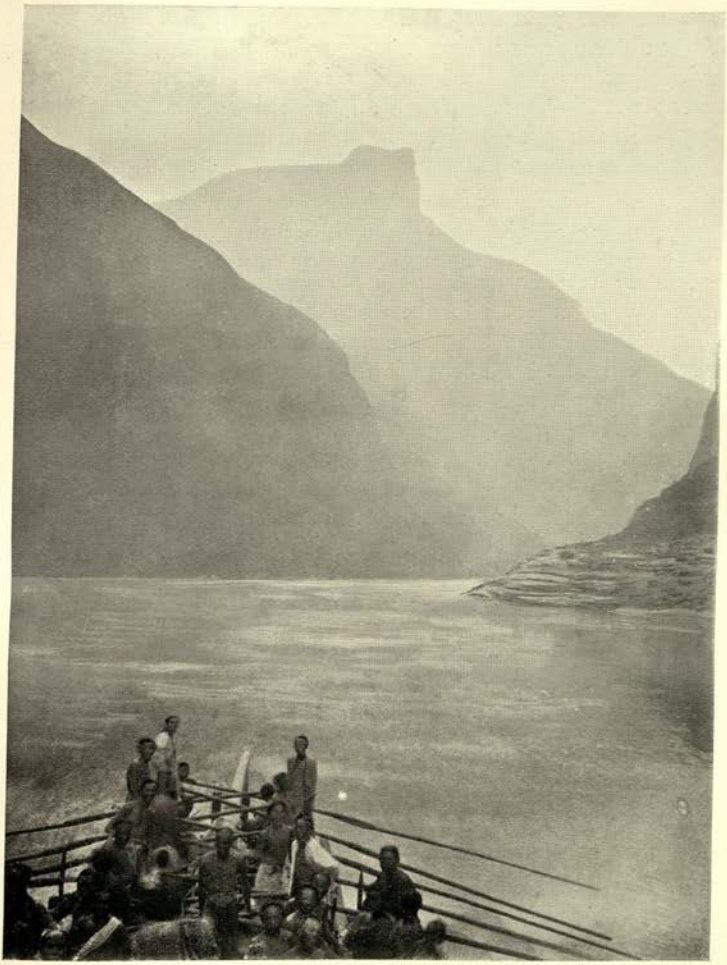


Photo by Captain W. A. Watts-Jones

Entrance to the Windbox Gorge

news of the taking of the Ta-ku Forts by the European powers. We had heard at Ya-chou that things were looking warlike in the north.

In the evening we got off in two small boats of a sort called "pan-t'ou," ourselves and servants in one, and the Gurkhas in the other. Our way lay down the Min River as far as Sui Fu[1], and thence by the Yangtze to Ch'ung-ch'ing-Fu, better known spelt as Ch'ung-k'ing. The total distance from Chia-ting to Ch'ung-k'ing is about 350 miles, and the current being strong at this time of year we got down in three days—forty-two hours of actual rowing. On this part of the river the rapids are not very bad and navigation is fairly easy.

We reached Ch'ung-k'ing on the evening of the 3rd July, and went the next morning to see Mr Fraser, the British consul. He had just received serious news. The allies under Admiral Seymour had been unable to reach Peking, and had been obliged to fall back on Tientsin with considerable loss.

What effect this news might have on the minds of the Chinese it was impossible to say, and one could not help feeling much anxiety as to what would be the fate of isolated Europeans in out-of-the-way places.

Even in Ch'ung-k'ing no one knew that disturbances might not break out. There were altogether eighty Europeans there, including many women and children, and as there is no regular foreign settlement, they were living scattered about in the Chinese town. Both Mr Fraser and M. Bons d'Anty, the French Consul, thought they would get a few hours' notice of any impending riot, and the "Pioneer," the new steamer navigating the upper part of the river, had been kept here as a means of getting everyone away, should it become necessary to leave the place. The chief danger came from the Chinese soldiers, of whom 300 were armed with mausers.

A gunboat had been asked for by Mr Fraser, and the "Woodlark" was expected to arrive in a week or so. Mr Fraser asked us to stay on at Ch'ung-k'ing till its

[1] Hsü-chou Fu is the correct official name of this town, but the Chinese usually call it Sui Fu.

arrival, and, though anxious to get on, we felt bound to do so. However the next day a telegram arrived saying the gunboat could not get up the rapids at this time of year.

As things still appeared quite quiet in Ch'ung-k'ing, we decided to leave, and Mr Fraser sent round to all British subjects advising them to take advantage of our escort to send their families down to Shanghai.

It was a difficult question for them to make up their minds about. To remain at Ch'ung-k'ing might mean exposing their families to the greatest dangers. But on the other hand they were most unwilling to abandon their work except under the most urgent necessity. Eventually one English missionary and his family, and the wife and child of the French doctor were the only people who accompanied us.

As events turned out, the whole Yangtze valley was kept free from Boxer disturbances by the efforts of the three viceroys who control the river provinces. But at that time nothing seemed more likely than that the Chinese, flushed by their temporary success in the north, would attack Europeans wherever they could find them. Mr Fraser was amply justified in his warnings to British subjects.

On the 7th July we left Ch'ung-k'ing in small house-boats called *k'ua-tzŭ* by the Chinese. They are about 50 feet long and have three small rooms in them. The captain stands up behind and steers, looking over the roof of the rooms. In front are the rowers, usually from eight to 12, according to the size of the boat. Right in the bows is the pilot with a large oar stuck straight out in front, and used as a sweep to assist in the steering in difficult places.

At this time of year the current is very strong, and navigation was exciting enough. In the whirlpools boats are often spun round and round three or four times before hard rowing gets them out. Going up stream there are a great many wrecks, chiefly due to the tow-rope breaking. Going down stream there are not so many accidents, but an exact knowledge of the river and great skill in managing the boat are necessary to avoid the numerous dangers from rapids, rocks, and whirlpools.

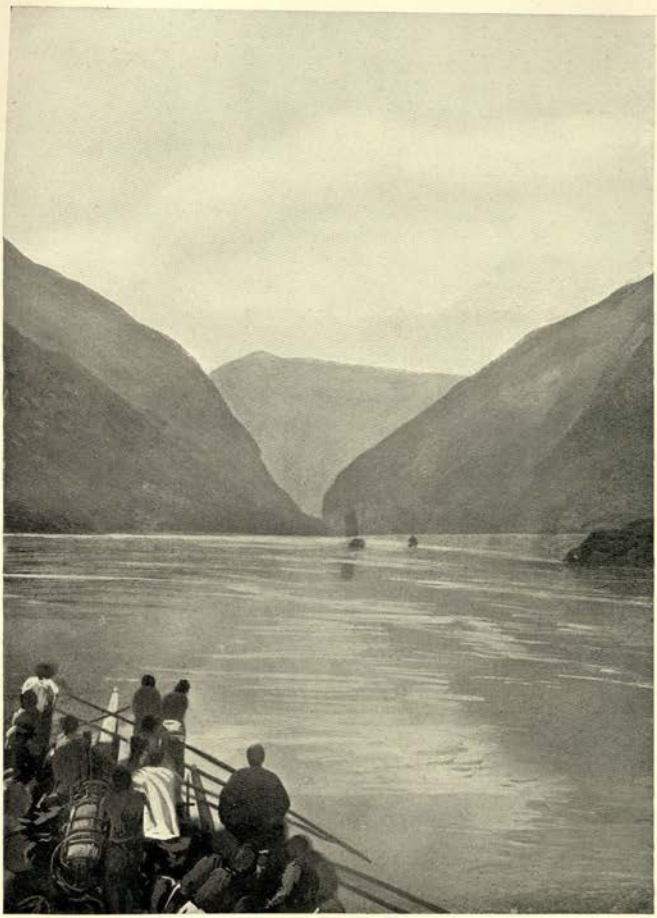


Photo by Captain W. A. Watts-Jones

Lower end of the Windbox Gorge

The scenery of the Yangtze gorges is certainly magnificent, but perhaps coming as we did from the splendid mountains of western China, it struck us less than it would a traveller going up stream from the dead flat of Shanghai.

Four days, or fifty-two hours of actual rowing, brought us to I-ch'ang where we were hospitably put up by Mr Wilton, the Vice-Consul. Our travels were over. Before us lay the dreary monotony of steamers and civilisation.

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CHAPTER XLI

CAPTAIN WATTS-JONES' LAST JOURNEY.

THE name of Captain Watts-Jones has been often mentioned in this book, and it is to his energy and skill that a large part of the preliminary reconnaissance of the Yün-nan Railway is due. It is only fitting therefore that this account of work in connection with that railway should not be closed without some reference to the journey which resulted in his untimely death.

In the winter of 1899—1900 he was again sent out by the Yün-nan Company to obtain a more extended view of railway possibilities in China. The first part of his journey led him through little known parts of Hu-nan, a province of whose inhabitants he formed a very high opinion.

At the end of February, 1900, he arrived at Ch'ung-k'ing and until the beginning of April was engaged on a preliminary reconnaissance for a railway from this place to Ch'êng-tu, the capital of Ssŭ-ch'uan. After a stay here of three or four weeks he started northward for the province of Kan-su with Mr J. Grant Birch whose acquaintance he had made in Ch'êng-tu. Their intention was to go to Lan-chou, the capital of Kan-su, and from there to strike eastward for Peking. They reached Sung-pan T'ing in the middle of May and then went northwards across the *ts'ao-ti* or grass land over an almost unexplored country.

Writing on the 16th June from Pei-ta-p'u Watts-Jones thus describes the country they had come through :—"We had a glorious time coming across the grass land. We came with yaks and had Chinese tents from the Sung-pan General, which we made weatherproof and habitable by putting our waterproof sheets over them. The crossing

was easy enough—for five days up a long flat valley, at first cultivated and then meadows with scrub timber. This led us up to 12,800 feet by a gradient that was never more than 1 in 50. Then up over a pass of 13,700 feet and down into a similar valley, but with pine woods, not the miserable firs of Yün-nan and Ssŭ-ch'uan, but 120-feet pines growing closely and evenly together, running right up the north slopes of the hills but never over the edge. Then another 13,700 feet pass and on to a plateau of nearly 12,000 feet. There we came to villages of shepherds of a curiously Red Indian type, speaking Tibetan. It is a glorious country, plains and low hills stretching away to the west and south as far as one can see in the clear light, miles and miles of blue and brown hills, none so steep that one could not ride up them, and with promise of plain and water in between. This country turns its back on the confused ranges of Ssŭ-ch'uan and drains towards the unknown west—towards the Yellow River or the Ya-lung?" Writing again from Lan-chou on the 22nd June, he says:—"We hear there has been a rising in Chih-li and the rebels have taken Pao-ting Fu."

From Lan-chou Captain Watts-Jones and Mr Birch started on a raft down the Yellow River for Ning-hsia. The river was high, and the boatmen losing control of the raft they ran on a rock which broke the raft in two. Watts-Jones and the boatmen who were in the fore part of the raft managed to save themselves by getting on to the rock. Mr Birch, who was inside in the hinder part of the raft at the time of the accident, was thrown into the water when the raft broke up and was carried away by the current and drowned. Watts-Jones and the boatmen managed to make the fore part of the raft serviceable again and got to shore.

Eventually Watts-Jones reached K'uei-hua-ch'êng in Shan-hsi province. By this time he had realised that the Boxer rising in Chih-li was a serious affair and that it was not possible to go on to Peking. He therefore made up his mind to go northward to Mongolia and find his way into Russian territory. He went to see the *tao-t'ai* of K'uei-hua on the subject, and was received in an apparently friendly manner, and asked to come again for a passport

the next day. The *tao-t'ai* had meanwhile consulted with the Tartar General and the result of their deliberations was that they decided to carry out the orders of the Governor of the province to kill all Europeans. The next day when Captain Watts-Jones came to the yamen for his passport he was seized by the *tao-t'ai's* soldiers, taken outside and murdered.

It would perhaps be out of place to speak here of the personal loss suffered by Captain Watts-Jones' own family and friends in his early death. But as the leader of the expedition on which he worked on the reconnaissance for the Yün-nan Railway, I may perhaps be allowed to say that it would be scarcely possible to find anyone who worked so hard or who had so much natural aptitude for picking out the best line in a most intricate country. In the following year he greatly increased his knowledge of the country, and at the time of his death it may certainly be said that he was the best authority on the subject of railways in western China.

APPENDIX I

PHYSICAL DESCRIPTION OF YÜN-NAN.

THE main characteristic of the province of Yün-nan is that it is an extremely mountainous country. So small indeed are the areas of flat ground, that on a small scale map they are almost lost in the masses of hills.

Although the whole province is mountainous, different parts of it differ somewhat in the direction of the main ranges and in the general character of the country.

The western part of Yün-nan is furrowed by rivers, whose general course is from north to south. Taking them in order from the west, these are the Taping, the Shweli, the Salween, the Mekong, the Black River, and the Red River. Of these the first two and the last two have their sources in the province; but the Salween and the Mekong are rivers of great length, which run down from far in the interior of Tibet, and do not reach the sea till they have passed many hundreds of miles beyond the southern frontier of Yün-nan.

The basins of these six rivers, with their numerous tributaries, form a country of deep, narrow valleys and high mountain ranges running parallel to each other in a general north and south direction.

As the rivers and the principal affluents flow from north to south, it follows naturally that the heights of the mountains should gradually diminish as they run southward. In the extreme north-west corner of Yün-nan the country is thoroughly Tibetan: the tops of the ranges rise here to 15,000 or 20,000 feet, and the lowest river valleys are 7000 feet. From here heights decrease fairly regularly

till the hill-tops run down to as low as 5000 feet in the south of the province[1].

Of the rivers which water this country some have cut much more deeply than others into the original plateau formation. The Salween, for instance, where it crosses the main road from Burma to Yün-nan Fu, at about the 25th line of latitude, runs at an elevation 2000 feet lower than the Shweli and the Mekong, which flow parallel to it at only a short distance.

This makes it difficult to speak generally of the relative heights of the mountain ranges above the valleys. Speaking very roughly, and including the large tributaries as well as the main rivers, it may be taken on an average that the valleys run at an elevation some 3000 or 4000 feet below the tops of the mountain chains which bound them.

This then is the general character of the western and southern parts of Yün-nan, but the eastern half of the province is of a somewhat different formation. The country is here more of the nature of a plateau, plains are more numerous, and many of them contain lakes of considerable extent. It would be a mistake to suppose that this part of the province is not mountainous, but it is on the whole less so than western Yün-nan. There are larger stretches of level country, and the ascents from the plains to the hill-tops are usually shorter.

Roughly speaking the western boundary of this plateau country may be taken as a line drawn from the Yangtze at Shih-ku (lat. 26° 50′, long. 99° 55′) southward to Ta-li Fu and thence south-east to Shih-ping Chou (lat. 23° 40′, long. 102° 35′). To the east the plateau character of the country is maintained up to the border of the province, and in the extreme south-east corner the country is in many parts broken up into numerous small basins from which the water has no outlet. To the north and north-east the plateau continues till it nears the Yangtze, when it breaks up into deep valleys which, bounded by almost precipitous mountains, run down into the great river.

The streams on the extreme western fringe of this

[1] As an exception to the general rule that the mountains of Yün-nan decrease in height as they run southwards, I may mention that there are peaks of over 11,000 feet in the extreme south-west corner of the province.

plateau drain into the Mekong and the Red River, but the main part of the water of eastern Yün-nan flows into the Yangtze and into the upper waters of the West River of Canton.

The general direction of both these rivers is from west to east, but unlike western Yün-nan, where the tributaries follow the direction of the main streams, the affluents in eastern Yün-nan of these two big rivers join them more or less at right angles. Consequently, though the drainage of this part of the province eventually goes eastward, most of the lesser rivers and mountain ranges run north and south.

The rivers both in western and eastern Yün-nan run for the greater part of their courses through steep mountains, which sometimes form nearly precipitous gorges, and sometimes slope more gently up. Occasionally a valley widens out to a breadth of a few miles and forms a cultivated and thickly populated plain.

APPENDIX II

THE AREA, POPULATION AND INHABITANTS OF YÜN-NAN.

ROUGH measurements on the map give the area of the province of Yün-nan as about 150,000 square miles, and this may be accepted as approximately correct.

To estimate the population is a far more difficult matter. It is probable that fifty years ago the numbers were greater than at the present day, for doubtless great loss of life and emigration to other provinces took place during the Panthay rebellion, which lasted from 1854 to 1873. Since then the province has slowly recovered, and while the indigenous population has increased, there has also been a constant and steadily increasing stream of immigration from the neighbouring province of Ssŭ-ch'uan.

After my second journey in Yün-nan I made a rough calculation of the density of population to the square mile over those tracts of country which I had surveyed the most thoroughly. In all of these I had noted the number of houses in the towns and villages, and I allowed an average of six persons to each house.

The result gave about 400 to the square mile in the plains, and 40 to the square mile in the hilly tracts. Taking the whole province I calculate that about one-fifteenth of the total area is plain land, and the remainder hills. This then would give 10,000 square miles with a population of 400 to the mile, and 140,000 square miles with a population of 40 to the mile.

$$10{,}000 \times 400 = 4{,}000{,}000 \text{ in the plains,}$$
$$140{,}000 \times 40 = 5{,}600{,}000 \text{ in the hills.}$$

Total population 9,600,000.

My very rough methods of calculation naturally give only an approximate result, but in default of any better estimate the population of Yün-nan may be taken as about ten millions[1].

This population is divided between very sparsely peopled mountains, which form the greater part of Yün-nan, and very thickly inhabited plains which, though they only comprise about a fifteenth of the area of the province, contains nearly half of its inhabitants.

In the plains the population is mainly Chinese[2], but not entirely so, for in the cold plateaus of the north-west are found Tibetans, while many of the low-lying plains of the south are inhabited by Shans. Moreover in the centre of the province some of the plains are peopled by Ming-chias, while an admixture of Lo-los is occasionally found. At a guess I should say that about four-fifths to nine-tenths of the population of the plains are Chinese, including under this name those who, even if of aboriginal extraction, are now in language and customs undistinguishable from the ruling race.

In the hills things are different. Here, as in the plains, one also finds the Chinese, and there is no large tract of country without Chinese villages in it. But living among them and forming the bulk of the hill population are numerous other tribes, each with its own language and its own customs[3].

In the north-west corner are Tibetans, and the semi-Tibetan Mo-so race. On the Burmese border are Kachins and Palaungs; also in the west of the province, but extending further into the interior, are the Li-sos; everywhere throughout Yün-nan are the Lo-los, a fine race and more numerous than any other hill tribe. Equally widely distributed are the Miaos, but they are only found in small and scattered communities. In the south-west, between the Salween and the Mekong, are the La-hus, who with their cross-bows and poisoned arrows proved formidable

[1] Some recent Chinese figures give Yün-nan a population of about 12,000,000, but these are said to be unreliable. The late Mr Litton, of the Consular Service, who had much experience of Yün-nan, estimated the number of inhabitants at 9,000,000.

[2] Among the Chinese I include the Panthays or Chinese Mahommedans.

[3] For details about these tribes see Appendix VIII.

foes to the Chinese troops a few years ago. Near them live the Was, many of whom are still unconquered and still carry on their head-hunting raids. Their relatives, the somewhat more civilised Las, occupy much of the country near the southern part of the Burma-Yün-nan frontier. In the south of Yün-nan are the P'u-mans; and further east are the Wo-nis and many other tribes speaking Lo-lo dialects. The Shans and Ming-chias I omit, as they are not properly speaking hill tribes but live in the plains and valleys.

To form an estimate of the relative numbers of the Chinese and non-Chinese population in the hills is a difficult task. With the possible exception of the Lo-los, the Chinese would doubtless outnumber any *one* other tribe, but still there are many tracts of country where they are decidedly in the minority. To say that the Chinese form one-third of the inhabitants of the hills, and other tribes the remaining two-thirds would perhaps not be very wide of the mark. This is merely a rough estimate, the result of impressions gained from travelling over the country, and must be taken only for what it is worth.

APPENDIX III

THE CLIMATE AND PRODUCTS OF YÜN-NAN.

In so large a province the nature of the country and the crops grown naturally vary somewhat, but except in the north-west corner there is a sufficiently close general resemblance between other parts of Yün-nan.

Let us deal first therefore with this north-west corner which in the nature of the country and of its inhabitants is purely Tibetan, forming with western Ssŭ-ch'uan that part of Tibet which is directly under Chinese rule.

Southwards the Tibetan tract extends to about the 27th parallel of latitude. North of this line is a country of very high mountain ranges, the plains even rising to from 8000 to over 12,000 feet. The climate here is naturally colder than other parts of Yün-nan, and where heights extend from 6000 feet on the river banks to over 15,000 feet on the hill-tops, it varies much in different places. At the higher altitudes snow may fall in any month of the year, and many of the passes are liable to be blocked throughout April. In the plains the climate is less severe, but except in a shut-in river bed it never becomes hot.

Parts of this country, especially the tops of the mountains, are bare and barren, but a great deal of it is clothed in fine forests of cedar, fir, and other trees. Rice cultivation hardly exists here: even the plains are too high and cold to grow it. A certain amount of maize is cultivated, but even for this a fairly warm climate is necessary, and the bulk of the crops consist of wheat and barley. Peach, walnut and other fruit trees also exist.

The cereal products of this part of Yün-nan are however scanty and poor. It is essentially a grazing country, for good grass is to be found nearly the whole year round.

Ponies, mules, cattle, sheep, and pigs are extensively reared, and in the colder places large herds of yaks are to be met with.

Mineral wealth too is not wanting in this corner of Yün-nan. In the neighbourhood of Wei-hsi T'ing there are mines of silver and copper, and just over the border of Ssŭ-ch'uan in the semi-independent state of Mi-li (lat. 28° 10′, long. 100° 50′) gold is found in some quantity.

Among other products of the Tibetan part of Yün-nan must be mentioned musk, skins and furs, rhubarb, and other Chinese medicines.

This corner of Yün-nan, however, owing to the sparseness of its population and its distance from trade centres, is not at present of great commercial importance, though wool, timber, and gold may in the future become important articles of trade.

Let us then now consider the rest of the province. The highest plains here are at an elevation of 8000 feet, while some of the river valleys in the south of the province are even below 2000 feet. But these extremes are exceptional. The great bulk of the plains of Yün-nan lie at an average of 6000 feet, with the hill tops rising some 3000 or 4000 feet above them.

The climate is excellent. In winter there are often frosts at night, but not of great severity, while in the daytime the weather is usually bright and pleasant. Snow falls in the plains only very occasionally and does not lie long. All through the dry season, which lasts from the beginning of November to the latter half of May, there is no unpleasant heat. From June to September inclusive is the monsoon, and rain falls heavily at times, with fine intervals of a few days. In these intervals the hottest weather is experienced, but in the higher plains the thermometer seldom rises above 85°. By October the main force of the rainy season has been spent, though some rain may still be expected. An occasional wet day or two there may be even in the dry season, but Yün-nan, except in its north-eastern corner, is free from the continual mist, clouds, and rain which are prevalent in Ssŭ-ch'uan in the winter.

The vegetation of the country naturally varies much in different parts of the province. The flat part of the plains

is chiefly cultivated. Of the mountain ranges some are rather bare, covered with grass or fern only; others are well clothed with fir woods, or at lower elevations with semi-tropical forests. To a traveller accustomed to the vast jungles of Burma, Yün-nan would appear a bare country, but it would seem well wooded when compared to the barren hills of the north-west frontier of India. It is in fact neither a very bare nor a very thickly wooded province. No doubt there was formerly much more forest, but the wants of the inhabitants in fire-wood and house-building have entailed much cutting of timber, which has never been replaced by planting. The amount of cultivation in the hills varies much according to the density of population and the fertility of the soil. In places nearly the whole hillside is fields; in other parts one may go for miles without seeing a clearing. In eastern Yün-nan especially the soil is often so dry and water so scarce that cultivation is hardly possible.

The principal crop of Yün-nan is rice. This is the staple food of the Yünnanese, and it is only in very out-of-the-way hill villages that the people are too poor to afford it and have to live on maize or millet. All the plains that are capable of being irrigated are given up to rice cultivation throughout the summer.

The rice harvest is in October, and when this has been reaped, a second crop of opium, wheat, or beans is in many places sown for the winter.

I should estimate the relative quantities grown as about half opium[1] and a quarter each of wheat and beans. It is not, however, every plain that is capable of producing this second crop off the ground from which the rice has been reaped. When this cannot be done some of the plain land is usually kept unsown with rice, so as to be used for winter crops.

In the hills rice is also extensively grown. In many places the sides of the valleys can be dug into terraces and irrigated by the little hill streams, and here good crops are obtained. In less favourably situated localities the rice

[1] Since this was written, however, the opium crop has been considerably diminished, as Hsi Liang, the present Viceroy, caused all poppies near Yün-nan Fu to be pulled up in Dec. 1907. Along the main routes and for two or three days' journey round the capital scarcely any opium has been grown in 1907–8.

crop is dependent on the rain for its water, and where there is any jungle this is cut down and burnt, the wood ashes helping to manure the ground. Maize, millet and buckwheat are also grown on the hills, and opium is one of the chief things cultivated. This latter crop is an easy one to raise, and the produce finds a ready sale. Opium cultivation is certainly increasing in Yün-nan.

Among other agricultural products of the province may be mentioned tobacco, which is largely grown in many districts; tea which comes principally from the Chinese Shan States south of Ssŭ-mao; sesamum and other oil-producing seeds; hemp used for making rope; sugar which will only grow in the lower and warmer valleys; walnuts, persimmons, pears, peaches and other fruits, and many different kinds of vegetables.

As to livestock, there is nothing as big as what we should call a horse, but ponies and mules are kept everywhere. Pack animals are the principal means of transport in the province, so that they form a very necessary possession both to farmers and merchants.

To the farmer cattle and buffaloes also are essential as a means of ploughing his fields, for ponies and mules are never employed for this purpose. In the deep mud and water of the irrigated rice fields buffaloes are the only animals that can do the ploughing.

Unlike the Shans the Chinese do not use bullocks as pack animals. It is true that in out-of-the-way places a farmer may occasionally be seen taking his produce to market with a mule saddle fastened on to a bullock or cow, but this is exceptional. There are no trading caravans of bullocks. In some of the plains of eastern Yün-nan bullocks and buffaloes may be seen drawing small carts, but these can seldom find a road good enough to lead from one plain to another, and are only used for farming purposes.

Nor are cattle considered by the Chinese as of any use for food. The orthodox Chinaman does not kill cattle to eat, and it is only in towns which contain a good many Mahommedan inhabitants that beef can occasionally be got. As to milk it is practically unknown in China. A little is now sold in Yün-nan Fu, but it is only in the Tibetan corner of the province that cows are regularly milked.

Sheep and goats are found in places all over the province, and in some districts in very large herds. The wool is sometimes made into felt rugs, but the Chinese do not know how to weave it into clothes. There is no reason why wool should not become an article of trade if better communications should make it saleable. Sheep are not sufficiently widely distributed to make mutton a common article of food anywhere.

Pork is the staple meat of Yün-nan, as of the rest of China, and pigs are kept everywhere both in towns and villages. It is a very poor man who cannot afford to mix some pork with his meal of rice. These two articles, with beans and cabbage, form the principal food of the Yünnanese.

As to the amount of livestock in the province I will not attempt to make any estimate. But as mules and ponies form nearly the only means of transport, buffaloes and cattle the only means of ploughing, and pigs the universal food of all classes, the numbers must be considerable. Moreover I do not think that the animals kept amount only to what is absolutely necessary for their owner. Many villagers own large flocks and herds, and the Yünnanese peasant is usually well off as far as possessions go, though he is not rich in money. The poverty of the poorer classes of the over-populated province of Ssŭ-ch'uan is almost unknown in Yün-nan.

We now come to mineral products. It is safe to say that there is no district in the province that does not contain mines, and with better communications Yün-nan might become one of the principal metal-producing countries of the world.

The most important mineral is *copper*, not only because copper mines are very numerous throughout the province, but because the *ch'ien* or cash, the only coin originally used by the Chinese, is made chiefly of this metal. The mines of Yün-nan supply a very large proportion of the copper used for coining, and as the value of the cash is about 400 to a shilling, and it is used throughout China, the demand for copper for this purpose alone is a very large one.

In the districts of Tung-ch'uan Fu and Chao-t'ung Fu are the mines which are at present most productive, but

copper mines are also worked in Yung-ch'ang Fu, Ta-li Fu, Ch'u-hsiung Fu, Ching-tung T'ing, Li-chiang Fu, Yung-pei T'ing, Wu-ting Chou, Ch'êng-chiang Fu and other districts.

Two copper-mining districts outside Yün-nan also deserve mention here, as they both lie within reach of the proposed railway. One of these is Wei-ning Chou in Kuei-chou province, a town through which the reconnoitred route actually passes. The other is Hui-li Chou, in the part of Ssŭ-ch'uan which runs down into Yün-nan to the north of the capital of the province.

Equally important with copper from a Chinese point of view is *silver*, for though the copper cash is the universal coin, lumps of silver weighed out in taels form in many parts of China the chief means of payment for larger sums than can be conveniently paid in cash.

This metal is if anything more abundant than copper, and one can seldom travel far in Yün-nan without seeing or hearing of silver mines. I doubt if there is any large district in the province which does not produce silver. Many of these mines are well worked, and Yün-nan supplies much of the silver used in other parts of China.

Iron is one of the commonest metals found in Yün-nan, and the tools and other things made from local iron are of good quality.

Lead is also a common metal, and *zinc* is mined in many places. Both these are used for mixing with copper to make cash.

Gold is not so widely distributed as the other minerals. The most productive mine is near T'a-lang T'ing (lat. 23° 25′, long. 101° 40′); this pays well in spite of the very primitive means employed for extracting the metal. Washing for gold is carried on in many parts of the Upper Yangtze and its tributaries.

The principal *tin* mine is in the south of the province at Ko-chiu, to the west of Mêng-tzŭ, but tin is also found in the Tung-ch'uan Fu district, and probably in other places.

Among other products may be mentioned *gypsum*, which is used by the Chinese to mix with beans to make a sort of bean curd which is a common article of food; and

sulphur and *alum*, both of which are extracted from hot springs which occur all over the province.

Salt also must not be forgotten. There are salt wells in many parts of Yün-nan, and the province supplies itself except the north-east corner which obtains its salt from Ssŭ-ch'uan. The working of the wells is a Government monopoly, so salt at present is not allowed to be imported from abroad[1].

Not least among the products of Yün-nan must be mentioned *marble*. From the quarries at Ta-li Fu is obtained a marble which is much used for tombstones and for ornamental work in houses. It is famous all over China, and with better means of transporting it to distant places the output would doubtless largely increase.

We now come to *coal*, the most important of all the products of the earth of Yün-nan, for on cheap fuel must largely depend the success of the mines. It is found in a great many places in the province, but varies much in quality. Some of it is very powdery and can only be used in the form of briquettes: in other places it is of good quality and can be obtained in large blocks. Even when the coal now in use is of inferior quality it does not follow that a better sort would not be found by mining deeper, for at present it is obtained principally from surface workings.

Coal is found in the neighbourhood of Ta-li Fu, and in several places between this town and Yün-nan Fu. Eastward from the capital it becomes still more abundant, and is found nearly all along the proposed railway line from here to the Yangtze. In the Hsüan-wei Chou district coal is almost the only kind of fuel that is used. Nor is it only near the line of the proposed railway that coal exists. It is mined in many places on the upper course of the Yangtze, and in several other districts of Yün-nan.

Of metals and of coal in Yün-nan it may be said that no examination of the mines has at present been made in a very detailed manner. If the railway is to be constructed it will be most essential that all mining districts anywhere within reach should be carefully examined, and a report made by experts as to the prospects of working them by machinery.

[1] For more details about the salt wells see p. 197.

APPENDIX IV

COMMERCIAL PROSPECTS OF THE YÜN-NAN RAILWAY.

WE now come to the consideration of what the Yün-nan Railway is likely to find to carry, and this can best be discussed under four heads.

1. Exports to other provinces or countries.
2. Imports.
3. Goods carried within the province.
4. Passenger Traffic.

With regard to exports and imports it must be borne in mind that the railway if carried right through is not simply a line connecting Burma with Yün-nan, but is also a line connecting the Yangtze and eastern China with Yün-nan. Goods would therefore be imported and exported in both directions.

Another point which must be emphasised is that Yün-nan has a temperate climate, and Burma a tropical climate. The natural result is that each country can produce many things which are impossible in the other, and that each can thus supply many of the other's wants.

Exports. Let us deal first with *exports.* *Rice* though extensively cultivated is never likely to be exported, as it forms the staple food of the province.

Wheat, however, is on a different footing. It forms a quite unimportant part of the food of the province, as flour is used chiefly for making cakes and sweetmeats. It is not therefore at present very extensively grown[1], and its cultivation might be enormously increased if there was an easy means of transport to Burma, a country which at present gets all its flour from India.

[1] Owing to the restrictions on the poppy there was in 1907–8 a very large increase in the amount of wheat grown.

Opium is produced in Yün-nan far beyond the requirements of the province, and is largely exported into other parts of China[1]. The opium of Yün-nan is considered by the Chinese to be of very fine quality, though not quite up to the standard of Indian opium.

Hemp, which at present is not much cultivated, might easily be extensively grown and exported for rope making. Many kinds of *fruit*, which will not grow in the tropical climate of Burma, thrive in Yün-nan, and even now form a fairly important export. These are apples, pears, quinces, peaches, apricots, cherries, persimmons (dried like figs), chestnuts, and walnuts. Yün-nan *tea* is famous all over China. There is not likely to be much trade in this commodity to Burma, but a railway through to Ssŭ-ch'uan should carry considerable quantities. *Livestock* already forms one of the principal exports from Yün-nan into Burma. Mules, ponies, cattle, and buffaloes are all far cheaper in China than in Burma, so that they can be sold at a profit in the latter country. Sheep are cheap in China, and do not thrive in the warm climate of Burma. At present slaughter-sheep are imported into Burma from India.

There are in Yün-nan large grazing grounds which are lying idle because there is not sufficient demand for live-stock. If the farmers had a ready means of disposing of their surplus animals, the flocks and herds of the province would doubtless largely increase. Moreover the trade which now exists in *horns* and *hides* would grow at the same time, and *wool* might become a most important article of export.

Among minor exports in which a considerable trade might spring up may be mentioned *pigs' bristles*, *ducks' feathers*, and the *white of eggs* for albumen; also from the Tibetan part of Yün-nan *furs* and *musk*.

As to minerals, *gold* has always been an article of export, chiefly in the form of gold-leaf to gild the Burmese pagodas. Whether *other metals* could be profitably brought into Burma or India is a question that cannot be decided till the mines have been more thoroughly examined, but

[1] This was written before the recent restrictions on opium-growing. See footnote on p. 311.

doubtless with mining operations developed by a railway there would be large exports to other provinces of China. At present there is an export trade of copper, zinc, and lead from Yün-nan to the Yangtze.

Imports. To come now to *imports*. Of these cotton is by far the most important. The whole population of Yün-nan is clothed in cotton clothes, and yet practically no cotton is grown in the province. The whole clothing of this part of China has therefore to be imported. It is brought in as raw cotton, as cotton yarn, and as cotton cloth; but the greater part of it comes as yarn and is woven into cloth in the province. Raw cotton will however always be a necessity, as in winter the Chinese wear wadded coats for warmth. The imported cotton cloth is usually too dear for the poorer classes, but is worn a great deal by those better off.

At present the chief weaving centre is at Hsin-hsing Chou (lat. 24° 20′, long. 102° 35′), and this has become firmly established owing to the treaty port at Mêng-tzŭ (Meng-tsz') having been opened before T'êng-yüeh (Momien). Weaving is, however, carried on at other places as well, and factories would spring up wherever a railway brought cotton yarn in cheaply.

In Ssŭ-ch'uan there is also a large population—estimated as at least 45,000,000—who are also almost entirely dependent for their cotton on outside sources. But with the probability of this province being connected by rail with Hankow in the near future, it is doubtful whether much of this traffic would be secured by the Yün-nan railway.

Woollen clothes are at present almost unknown at Yün-nan. It is doubtful perhaps if fashion would ever allow woollen coats to be worn in public instead of the universal wadded cotton garments. But this would probably not apply to sleeping in woollen blankets and wearing woollen underclothes.

Leather is an article that is not well made in China, and imported leather should find a sale. *Firewood* is scarce and dear in most parts of Yün-nan and Ssŭ-ch'uan. In Burma there is an almost inexhaustible supply at a quarter the price. This may become an important article of trade, and *timber* should also be an import.

Photo by Captain W. A. Watts-Jones

A road leading up from the Nam Ting

Salt is at present imported into north-eastern Yün-nan from Tzŭ-liu-ching in Ssŭ-ch'uan.

Finally there are many things which are almost necessaries of life in Europe that the Chinese would readily buy if increased trade gave them some surplus money with which to purchase them. The Chinaman is very willing to adopt new ideas, and to buy things that are new to him if he sees they are useful.

The late Mr G. Litton, in a consular report on Yün-nan, gave the following as articles likely to have an extended market:—"Cheap clocks and watches, mirrors, enamelled ironware, cheap ribbons and laces for trimmings, pocket knives, padlocks, umbrellas, leather belts, cigarettes, jade, coral, and amber." To these I would add lamps, kerosene oil, candles, glasses, fans, musical boxes, tinned milk, sugar, biscuits, and other groceries. It should be remembered also that the introduction of railways will lead to the opening up of mines, and consequently to a considerable import of mining machinery.

Goods carried within the province. Nearly every product of Yün-nan would be carried by the railway from one place to another within the province, for there is naturally much produce taken from country districts to Yün-nan Fu and other towns. Considerable quantities of rice would be carried in this way, and there must be a large trade in such articles as tea, sugar, salt, and tobacco, which are only produced in certain localities, though they are almost necessities of life everywhere. Firewood too should be carried in large quantities from the more wooded districts to the towns and to places where fuel is scarce.

With the mines well worked there would be a great demand for carriage not only of metals but of coal and other fuel.

Passenger traffic. The prospects of passenger traffic in Yün-nan would I think be good. The Chinaman is an enterprising man who does not hesitate to travel long distances for trade purposes, or to emigrate altogether to another part of the country if he thinks he can benefit himself by doing so.

As it is, the Chinese are quite accustomed to making journeys for business or pleasure, and there will be much

moving about in the province if the railway is made. The increase of trade, the opening of mines, and the opportunities for settling in poorly populated districts ought to bring a large amount of passenger traffic to the railway. Especially if the line is carried through to Ssŭ-ch'uan will there be large numbers of immigrants from that province, the eastern portion of which is very densely populated.

In this short account of the class of traffic to be expected on the Yün-nan railway I have dwelt chiefly on products which already form articles of commerce. But it must be always borne in mind that the Yün-nan railway will eventually form a great highway between India and China.

Beyond Yün-nan lies Ssŭ-ch'uan, the largest and the richest province of the Chinese Empire, and beyond Ssŭ-ch'uan lies the whole of eastern China, the greatest trade mart of the world. It is hardly open to doubt that a great through traffic both in goods and passengers must spring up between Europe and India on the one hand, and China on the other.

APPENDIX V

THE LINE OF THE PROPOSED RAILWAY.

THE brief description given in Appendix I of the physical characteristics of Yün-nan will convey some idea of the difficulties of railway construction in that province. It will be readily inferred from the above description that the western part of Yün-nan presents great difficulties, that the central plateau country is somewhat easier, and that obstacles again increase where the waters of the plateau of Yün-nan run down into the comparatively low level of the Yangtze.

That this should be so is unfortunate, for the greatest engineering obstacles are thus placed at the two ends of the line. So, whether it is begun from Burma or from the Yangtze, the first part of the construction will be undertaken in the face of great difficulties and at a considerable cost.

The whole line from Kun-long to the Yangtze may be roughly epitomised as follows :—The first 50 miles are easy, the next 250 miles decidedly difficult, then a stretch of 400 miles of fairly easy work, another 250 miles extremely difficult, and the last 50 miles to the Yangtze comparatively easy.

The reconnaissance for the railway was carried out by the late Captain W. A. Watts-Jones, R.E., and by Captain C. G. W. Hunter, R.E., with the object of determining the possibilities of railway construction through this country. The work was confined to about six months, so it will be readily understood that limits of time did not allow of more than a very rough preliminary reconnaissance of certain routes being made.

This being so, further exploration will doubtless suggest many alterations, and I do not therefore propose here to describe these routes very minutely, but merely to give

a general account of their principal features from a railway point of view.

From Kun-long (1,800 feet) the obvious entry into Yün-nan is by the valley of the Nam Ting. From the map it might be thought that this was an easy route for a railway to follow, and for the first 50 miles—as far as Mêng-chien—this is so. Above this, however, the river runs through steep-sided gorges and presents one of the most difficult pieces of construction in the whole line. But there is no help for this. The watershed between the Salween and the Mekong must be crossed somewhere, and the Nam Ting valley—difficult though it is—is likely to prove the most practicable way.

Leaving the Nam Ting valley at the most northerly point of the sharp bend made by the upper course of this river, the railway would cross the watershed at 5,600 feet, and descend to Yün Chou. This is the first Chinese town through which the line would pass, situated at a distance of 145 miles from Kun-long. Its height is 3,900 feet.

The next obstacle to the progress of the line is the Mekong—a very formidable river—for though its breadth is not more than 100 yards or so, it runs for the greater part of its course between high mountains of wall-like steepness. In very few places could a practicable route for a railway be found over its valley, and it is a fortunate circumstance that in the neighbourhood of Yün Chou a way across it has been discovered which is rather less difficult than might have been expected.

The railway would follow down the Nan-ch'iao Ho from Yün Chou to the Mekong (3,250 feet), turn up the Mekong for about 20 miles, and then up the tributary of that river which runs down past Kung-lang. This stream takes the line to the top of the range (7,500 feet) which forms the eastern limit of the Mekong valley. All this section would be difficult, especially the lower course of the Nan-ch'iao Ho and the Mekong[1].

[1] A study of the map might lead to the supposition that the line, having reached the Mekong, might be taken up that river and its tributary the Yang-pi Ho to Ta-li Fu. Nothing, however, could be more erroneous than to suppose that the valleys of the big rivers of Yün-nan lend themselves to railway construction. They flow principally through such steep gorges that any great length of river line would be too costly to be practicable. Wherever circumstances render it imperative that the line should follow the valley of a large river, there are to be found the most expensive and difficult bits of construction.

Photo by Captain W. A. Watts-Jones

The Mekong on the Yün Chou–Ta-li Fu road

The railway would now descend into the basin of the Red River, and one branch of this river takes it down to Nan-chien, whence another branch affords a feasible route through Mi-tu to Yün-nan Hsien[1] (6,800 feet).

This town, which is reached at a distance of 295 miles from Kun-long, lies on the main road which joins Ta-li Fu to Yün-nan Fu, Ta-li Fu itself being left some 40 miles off to the west. As Hsia-kuan, the commercial suburb of Ta-li Fu, is the most important trade centre of the province: a branch line was reconnoitred in this direction.

This branch would leave the main line at Mi-tu, and passing into the Hung-ai plain, would thence follow approximately the main road through Hsia-kuan to Ta-li Fu. From here it could be easily taken as far north as Lang-ch'iung Hsien. The distance from Mi-tu to Ta-li Fu would be 40 miles, and another 30 miles on to Lang-ch'iung Hsien. The whole branch would be easy construction except for the range west of Hung-ai, which presents considerable difficulty.

To return to the main line, we now begin a stretch of 400 miles of comparatively easy going, the line following approximately the main road through Ch'u-hsiung Fu, Yün-nan Fu, and Ch'ü-ching Fu to Hsüan-wei Chou. Unfortunately in this easier tract of country there are two places where it seems difficult to avoid using a steeper gradient than the 1 in 50, which can be maintained for the rest of this section. One of these difficult pieces is the length of 60 miles between the Yün-nan-yi plain and Sha-ch'iao[2], and the other consists of only five miles of difficult ascent east of Yao-chan-kai (lat. 25°, long. 102° 10′).

Yün-nan Fu, the capital of the province, is reached at 535 miles from Kun-long, and Hsüan-wei Chou at 690 miles.

At the north end of the Hsüan-wei plain the comparatively easy stretch of country which has been followed from Yün-nan Hsien comes to an end. Beyond this lies an intricate mass of mountain chains, while, to make matters worse, right across the route which the railway

[1] Not to be confused with Yün-nan Fu (or Yün-nan Shêng), the capital of the province.

[2] Sha-ch'iao lies about 10 miles by road north-west of Chên-nan Chou and six miles south-east of Ta-fu-ssŭ.

must follow, runs the K'o-tu Ho at an elevation from 1,500 to 2000 feet lower than that of the neighbouring valleys.

To quote Captain Watts-Jones's words :—"The country would be quite impossible for a railway were it not for one feature—the valleys are flat at the bottom and fairly broad, generally 50 to 150 yards, and seem to have no sudden drops. The stream spreads over perhaps half of the valley but is always very shallow. Fields a foot above the stream seem to escape injurious flooding." Taking advantage of this conformation of the ground, he was able to find a fairly practicable though no doubt very difficult route, chiefly following the river valleys to Wei-ning Chou (7,500 feet).

From this point—760 miles from Kun-long—two different routes were reconnoitred towards the Yangtze.

(1) *Viâ* Pi-chieh Hsien to Na-ch'i Hsien.
(2) *Viâ* Chao-t'ung Fu to Sui Fu.

To take first Number (1), between Wei-ning Chou and Yung-ning Hsien the country is extremely difficult. Some very heavy gradients are necessary to get over the ranges of hills, and the river valleys, often running through steep-sided gorges, do not lend themselves to railway construction. Should it be necessary to adopt this route, the work would be very expensive.

Yung-ning Hsien is 926 miles from Kun-long, and from here on to Na-ch'i Hsien on the Yangtze (50 miles) would for the most part be a comparatively easy bit of construction with no very steep gradients.

Number (2) would lie as far as Chao-t'ung Fu over open rolling downs, and there is only one difficult bit where at T'ao-tien-pa an affluent of the Niu-lan Chiang has cut out its valley below the level of the Chao-t'ung plain.

From Chao-t'ung Fu onwards the line would have to follow approximately the main road, that is to say, it must cross a low pass at the head of the Chao-t'ung plain, and thence follow down the banks of the Hêng Chiang to the Yangtze. The upper part of the Hêng is decidedly difficult, with a bad gradient and very steep side-slopes. Lower down the valley gradually improves, and where it debouches at An-pien there is a good place to bridge the Yangtze, and from here on to Sui Fu is quite easy.

Photo by Captain W. A. Watts-Jones

The Hêng Chiang

SUMMARY OF PRELIMINARY RECONNAISSANCE OF PROPOSED YÜN-NAN RAILWAY.

Miles	From	To	Ruling gradient	Remarks
0 to 55	Kun-long	Mêng-chien	1 in 100	Easy route up the Nam Ting valley.
55 to 110	Mêng-chien	Mêng-lai	1 in 100	Difficult owing to steep-sided gorges.
110 to 145	Mêng-lai	Yün Chou	1 in 30	Over the Salween-Mekong watershed. About 15 miles of the ruling gradient.
145 to 210	Yün Chou	Mouth of Kung-lang River	1 in 100	Down the Nan-ch'iao Ho and up the Mekong. Difficult owing to gorges. Line quite level for considerable part of this.
210 to 250	Mouth of Kung-lang River	Nan-chien	1 in 20	Over Mekong-Red River watershed. About 16 miles of the ruling gradient.
250 to 295	Nan-chien	Yün-nan Hsien	1 in 25	Down one branch of Red River and up another. Ruling gradient only for last 8 miles. Much of this section on 1 in 50.
295 to 325	Yün-nan Hsien	Yün-nan-yi	1 in 100	Over plains of Yün-nan Hsien and Yün-nan-yi.
325 to 385	Yün-nan-yi	Near Sha-ch'iao	1 in 25	Rather intricate country.
385 to 490	Near Sha-ch'iao	Yao-chan-kai	1 in 50	Two tunnels, one on each side of Kuang-t'ung Hsien.
490 to 495	Yao-chan-kai	For 5 miles	1 in 20	Very steep ascent for 5 miles.
495 to 690	5 miles E. of Yao-chan-kai	N. end of Hsüan-wei Chou plain	1 in 50	Fairly easy line. A tunnel E. of An-ning Chou. Yün-nan Fu passed at mile 535.
690 to 760	N. end of Hsüan-wei Chou plain	Wei-ning Chou	1 in 20	Difficult line with a tunnel E. of the Hsüan-wei plain and some difficult gorges.
760 to 870	Wei-ning Chou	Ta-kuan-lao	1 in 25	As far as Chao-t'ung Fu fairly easy except for one difficult bit near T'ao-tien-pa. From Chao-t'ung Fu down the Hêng Chiang by difficult gorges.
870 to 960	Ta-kuan-lao	Sui Fu	1 in 100	Fairly easy down the lower Hêng Chiang and the Yangtze. Bridge over Yangtze near An-pien.
		ALTERNATIVE ROUTE FROM WEI-NING CHOU.		
760 to 926	Wei-ning Chou	Yung-ning Hsien	1 in 12 rack	Difficult line through intricate country. Rack lines on 1 in 16 and 1 in 12 would be necessary for a few miles.
926 to 976	Yung-ning Hsien	Na-ch'i Hsien	1 in 50	Fairly easy line down the Yung-ning Ho.
		BRANCH LINE FROM MI-TU THROUGH HSIA-KUAN AND TA-LI FU TO LANG-CH'IUNG HSIEN.		
70 miles	Mi-tu at mile 280	Lang-ch'iung Hsien	1 in 20	An easy line except for a steep ascent W. of Hung-ai where the ruling gradient is used for 6 miles. Most of the line is nearly level.

APPENDIX VI

POSSIBLE ALTERNATIVES DISCUSSED.

THE question will now naturally be asked whether the route that I have just described is the only possible one for a railway from Burma to the Yangtze. Three different alternatives to this route have been suggested by those who have studied the subject, and of these I will give a short account.

First there is the Chien-ch'ang valley route. This valley lies in the province of Ssŭ-ch'uan about long. 102° 15′ and stretches north and south from lat. 28° 40′ down to lat. 27°. It is fairly level and easy for a railway, and lies along the An-ning River which is a tributary of the left bank of the Yangtze.

It seemed possible that a feasible route might be found from the south to the Yangtze, and then up the An-ning River and down the T'ung River to Chia-ting-Fu (lat. 29° 35′, long. 103° 45′). We spent a considerable time in reconnoitring this route, and I do not think there is any doubt that it is impracticable.

It will be needless here therefore to spend much time in discussing the details. The river which runs northward from Ch'u-hsiung Fu, and the P'u-tu Ho which is the outlet of the Yün-nan Fu Lake, both seemed possible lines of approach to the Yangtze, and both proved too difficult for a railway.

A way down to the river was however found from Yün-nan Hsien (lat. 25° 30′, long. 100° 40′) to Chin-chiang-kai (lat. 26° 15′, long. 100° 35′). But having reached the Yangtze here, the line would have to leave it at once, for the gorges for 100 miles below this point are not practicable

for a railway. A difficult route might be got following approximately the road to Yung-pei T'ing and rejoining the Yangtze at Ma-ch'ang (lat. 26° 35′, long. 101° 30′). The gorges of the lower Ya-lung and An-ning Rivers, which the railway would have to ascend to the Chien-ch'ang valley, are extremely difficult. The Chien-ch'ang valley itself is easy, and the Hsiao-hsiang-ling pass north-east of Lu-ku might be just feasible.

So far the route may be considered as just within the bounds of practicability, but the gorges of the T'ung River by which it must descend to Chia-ting seem to preclude all idea of a railway.

Another alternative has been suggested, passing through Kuei-chou province to the T'ung-t'ing Lake in Hu-nan. This has the advantage of bringing the railway to the part of the Yangtze that is navigable for steamers, but to counterbalance this it does not touch Ssŭ-ch'uan, the richest and most populous province of China.

This line would leave the Yün-nan railway at Pi-chieh Hsien (lat. 27° 15′, long. 105°) and from there go eastwards through Kuei-yang Fu and Chên-yüan Fu to Hêng-chou Fu in Hu-nan. The route has not been examined for a railway, but Captain Watts-Jones made a study of the question and got much information about the nature of the country and the levels from travellers who had been over it. He came to the conclusion that it was probably impracticable.

This opinion cannot of course be taken as definitely settling the question, for Captain Watts-Jones had not himself seen the country and was dependent on the observations of others. It seems certain, however, that the 140 miles from Pi-chieh Hsien to Kuei-yang Fu is as difficult as, or possibly more difficult than, the 143 miles which separate Pi-chieh Hsien from Na-ch'i Hsien on the Yangtze.

This line through Kuei-chou may in fact be considered more as an extension of, than as an alternative to, the Yün-nan line. It branches off from the latter only 143 miles from its termination on the Yangtze, and would open up the provinces of Kuei-chou and Hu-nan, not that of Ssŭ-ch'uan.

Another possible alternative has been suggested by a French officer, the late Lieutenant Grillières. He explored the course of the Niu-lan Chiang, the river which flows past Hsün-tien Chou (lat. 25° 30′, long. 103° 15′) and finally falls into the Yangtze. M. Grillières describes the valley of this river as much more practicable for a railway than has been generally supposed. Its lower course he considers, however, to be impracticable, and he would leave the Niu-lan at a point south of Chao-t'ung Fu and take the line through that town and thence down the Hêng Chiang by the route already described (p. 324).

M. Grillières has not published any full account of his travels, and without more details it is impossible to speak definitely of his proposals, but a line which would avoid the difficult country between Hsüan-wei Chou and Wei-ning Chou might be well worth further examination.

One more alternative may also be touched on, though I do not think it has been previously suggested by anyone, and I only mention it here to point out its disadvantages. It might be said, "If the French have the easiest route of penetration into Yün-nan, why not join our railway system in Burma to theirs in Tong-king and thus connect India and China?"

If such a line were taken through the Shan states to Tong-king, either from Lashio (lat. 22° 55′, long. 97° 45′) or through Keng Tung (lat. 21° 15′, long. 99° 35′), it would pass at right angles to the ranges through a mountainous country which would be likely to prove quite as difficult as Yün-nan. Moreover the country tapped by it would be a very poor one, and the distance to Yün-nan Fu considerably longer than by the Yün-nan route.

A better chance would be to carry the line considerably further south. The French already talk of constructing a railway from Vinh on the coast of Annam to Lakhon on the Mekong. To join this to Burma, *viâ* Korat, Ayudia, Raheng and Moulmein, would perhaps be feasible.

The objections to such a line are, however, obvious. The distance, roughly calculated, from Rangoon to Yün-nan Fu would be 1,500 or 1,600 miles against 1,100 miles by the Kun-long route. The line would naturally do nothing to develop western Yün-nan, nor would trade from

Yün-nan or Ssŭ-ch'uan be brought to Burma, for it would get to Tong-king first. As a through means of communication between India and China it would have the great disadvantage of passing through a French colony, where duties might be levied on British goods.

The conclusion then seems to be that the reconnoitred route in its general outline is likely to prove to be the best as far as Yün-nan Fu.

Between this place and the Yangtze, however, much further reconnaissance must be undertaken before a route can be selected.

APPENDIX VII

THE FRENCH RAILWAY INTO YÜN-NAN.

THE proposed route of the British railway from Burma to the Yangtze has now been described, but it is necessary also to consider the French schemes for opening up the trade of Yün-nan. The French colony of Tong-king lies in a much better position than Burma for communication with Yün-nan Fu and with the eastern part of the province. Not only is the distance shorter, but the country is easier for a railway. A line has now been constructed from Haiphong, the sea-port of Tong-king, up the Red River valley to Lao-kai, on the frontier of Yün-nan, and this railway is now being carried on to Yün-nan Fu.

The line originally surveyed left the Red River at Hsin-kai, which lies above Lao-kai, passed through the "treaty-port" of Mêng-tzŭ, and followed the main road from there to Kuan-yi on the Ch'ü Chiang. Its further progress northward was here stopped by a high range, so the survey was carried westward up the Ch'ü Chiang, passing through Hsi-o Hsien and Hsin-hsing Chou to K'un-yang Chou, and from there round the east side of the lake to Yün-nan Fu.

Later surveys have, however, discovered a new route, which has superseded that originally adopted. The new route leaves the river at Lao-kai, following up the Nan-hsi Ho (or Nam Ti) and passing a few miles east of Mêng-tzŭ. From here it keeps to the east of the old survey, passing through A-mi Chou; thence following up the Pei-ta Ho to Yi-liang Hsien and so westward to Yün-nan Fu.

There seems no doubt that from the Red River to Mêng-tzŭ the new trace is superior to the old, though

naturally this part of the line, rising from the low level of Tong-king to the high plateau of Yün-nan, must be the most difficult and expensive section, whichever route is adopted.

From Mêng-tzŭ onwards opinions have differed as to the line the railway should take. The old survey passes through a far richer country and touches several important towns, whereas the new line in the part between Mêng-tzŭ and Yi-liang Hsien taps very poor districts. This, however, is counterbalanced by a gain of 16 miles in length, and by a reduction of the ruling gradient from 1 in 29 in the old trace to 1 in 40 in the new.

As it has now been finally decided to adopt the new survey, this line has been shown on the map. The distance from Haiphong to Lao-kai is 248 miles, and from Lao-kai to Yün-nan Fu 287 miles—a total from the sea to Yün-nan Fu of 535 miles.

APPENDIX VIII

THE TRIBES OF YÜN-NAN.

(*a*) Introductory.

Diversity of tribes and languages—Reasons to be found in physical character of country—Classification by languages.

THE numerous non-Chinese tribes that the traveller encounters in western China, form perhaps one of the most interesting features of travel in that country. It is safe to assert that in hardly any other part of the world is there such a large variety of languages and dialects, as are to be heard in the country which lies between Assam and the eastern border of Yün-nan and in the Indo-Chinese countries to the south of this region.

The reason of this is not hard to find. It lies in the physical characteristics of the country. It is the high mountain ranges and the deep swift-flowing rivers that have brought about the differences in customs and language, and the innumerable tribal distinctions, which are so perplexing to the enquirer into Indo-Chinese ethnology.

A tribe has entered Yün-nan from their original Himalayan or Tibetan home, and after increasing in numbers have found the land they have settled on not equal to their wants. The natural result has been the emigration of part of the colony. The emigrants, having surmounted pathless mountains and crossed unbridged rivers on extemporised rafts, have found a new place to settle in, and have felt no inclination to undertake such a journey again to revisit their old home.

Being without a written character in which to preserve their traditions, cut off from all civilising influence of the outside world, and occupied merely in growing crops

enough to support themselves, the recollection of their connection with their original ancestors has died out. It is not then surprising that they should now consider themselves a totally distinct race from the parent stock. Inter-tribal wars, and the practice of slave raiding so common among the wilder members of the Indo-Chinese family, have helped to still further widen the breach. In fact it may be considered remarkable that after being separated for hundreds, and perhaps in some cases for thousands, of years, the languages of two distant tribes of the same family should bear to each other the marked general resemblance which is still to be found.

The hilly nature of the country and the consequent lack of good means of communication has also naturally militated against the formation of any large kingdoms with effective control over the mountainous districts. Directly we get to a flat country with good roads and navigable rivers, we find the tribal distinctions disappear, and the whole of the inhabitants are welded into a homogeneous people under a settled government, speaking one language.

Burmese as heard throughout the Irrawaddy valley is the same everywhere. A traveller from Rangoon to Bhamo will find one language spoken throughout his journey, but an expedition of the same length in the hilly country to the east or to the west of the Irrawaddy valley would bring him into contact with twenty mutually unintelligible tongues.

The same state of things applies to Siam and Tong-king —one nation speaking one language in the flat country and a Tower of Babel in the hills.

It may be urged against this that a great part of Yün-nan *was* for at least five centuries actually one kingdom ruled by Shan dynasties, known to the Chinese as Nan-chao. But it must be remembered that the splitting up into different tribes of many of the races who inhabited the mountains had doubtless already taken place before such a comparatively recent date as the eighth century A.D. when Pi-lo-ko first combined the six ancient kingdoms of Yün-nan into one empire.

Moreover it is extremely unlikely that the Shans exercised much control over the hill tribes, or influenced to any

extent their customs or language. It is in fact recorded in the Chinese chronicles that the Nan-chao empire had many wars with the races on their borders; within their own country, content with the possession of the fertile plains and valleys, they would naturally be inclined not to interfere much in the affairs of the neighbouring hillmen. Even at the present day, six and a half centuries after the Chinese conquest of Yün-nan, there are many remote parts of the province where no sign of Chinese officialdom is ever seen.

So far in fact from proving anything to the contrary, the Nan-chao empire affords a most striking testimony to the influence that a large kingdom with a settled government has on abolishing dialects and establishing a standard form of speech. For the different communities of the Shan race though living in the valleys, are just as much cut off from each other by steep mountain ranges and deep rivers as are any of the hill tribes, and yet of all the Indo-Chinese families, the Shans are the only one whose language has not been split up into mutually unintelligible dialects.

From the sources of the Irrawaddy down to the Siamese border, and from Assam to Tong-king, a region measuring 600 miles each way and including the whole of the former Nan-chao empire, the language is practically the same. Dialects of course exist as they do in every country in the world, but a Shan born anywhere within these bounds will find himself able to carry on a conversation in parts of the country he has never heard of, hundreds of miles from his own home. And this it must be remembered is more than six hundred years after the fall of the Nan-chao dynasty, and among Shans who have had no recent political or commercial relations with each other.

Before entering into any description of the tribes of Yün-nan it will be well to make an attempt to reduce them to some sort of order, by arranging them in groups. The only way at present to do this is to classify them by their languages. That resemblance of language is not necessarily a proof of the relationship of two races is undoubtedly true. Conquest or other causes may have introduced an alien tongue. But if supported by probability and if not

contradicted by historical facts or great physical diversity, connection of language may be accepted as affording a *prima facie* case for connection of race.

In considering the comparative philology of the tribes of Yün-nan it is not possible to confine oneself to the language of that province alone. The tongues of the Himalayan hill tribes, and of many other races of Indo-China, of China, and of Tibet have such an important bearing on the subject that some reference to them could not be omitted. I have, however, in the Tables of Vocabularies only alluded to the larger and more important of the groups of languages which lie outside our special sphere.

So little information has until the last few years been available about most of the Indo-Chinese tribes, that it is not surprising that the great professors of philology have not gone very deeply into the branch of their science that includes this region. It can be asserted with confidence that nothing has been written on this subject that does not contain errors, and the present attempt will doubtless be found equally open to such criticism.

The reason of this is in great part to be found in lack of sufficient reliable information. Much of the most valuable material for a thorough investigation exists in the dialects of rude and perhaps unknown tribes living in the most inaccessible countries. Grammars and dictionaries are available of only a quite minute proportion of the languages of western China and Indo-China. Of many dialects we have no knowledge at all, while others are only known through small vocabularies obtained by travellers, which must necessarily be somewhat inaccurate and incomplete.

It seems a pity that there should be no philologist to devote his attention to such comparatively untrodden ground. In Yün-nan alone there is plenty of work to last a man his lifetime. Frontier officials, consuls, and travellers have not the time to go into the subject in the thorough way that it demands.

In attempting a classification of the languages with which we are concerned, we are confronted at once with the initial difficulty of what name to give to the group.

To call them *Turanian, Mongolian* or *Scythian* is to use too wide a term, for these names must also include the Tartar, Japanese and other languages, which, though of probably the same original stock, now differ widely in structure from those we are discussing. Hodgson used *Himalaic* as a name for this family, but as the enormous majority of the races who use these languages do not now live anywhere near the Himalayas, it seems to be not altogether appropriate. *Indo-Chinese* as a geographical term is fairly satisfactory as indicating the countries lying between India and China, but as the name of a group of languages it would seem to infer a connection with the languages of the plains of India which does not exist. Moreover Chinese itself must be included in this family of languages, and the term *Indo-Chinese* is here obviously inapplicable.

Polytonic is the name used in the Census of Burma 1891, and it is true that the use of different tones of voice to distinguish sounds which would otherwise be the same, is a marked characteristic of these languages, but at the same time both the Cambodian and Talain languages are said to be spoken without tones, so the name is not universally applicable. *Monosyllabic* is another term which alludes to a distinguishing characteristic which differentiates these languages from all others, and seems an unobjectionable name, but at the same time it does not in itself give any clue to the identity of the races to whose speech it is applied

Captain C. J. Forbes, writing more than twenty years ago, suggested *Sinitic* as a suitable designation, and this seems the best general name that can be given to this family, alluding as it does to the largest and most prominent of the races that speak these languages.

Having adopted the linguistic classification of the tribes of Yün-nan as the only satisfactory means of reducing them to order, I will proceed to a consideration of the affinities of their languages, and will reserve for a future chapter descriptions of the dress, customs and other characteristics of these races.

(*b*) The languages of Yün-nan and western Ssŭ-ch'uan.

Classification of languages of Yün-nan and western Ssŭ-ch'uan—The Mon-Khmer family—Shan or Tai family—Chinese family—Tibeto-Burman family.

The following Table shows the languages of Yün-nan and western Ssŭ-ch'uan classified under their families and groups :—

SINITIC LANGUAGES OF YÜN-NAN AND WESTERN SSŬ-CH'UAN.

I. Mon-Khmer Family	(i) Miao-Yao Group	1. Miao or Mhong 2. Yao
	(ii) Min-chia Group	1. Min-chia or Pe-tsö
	(iii) Wa-Palaung Group	1. Wa 2. La 3. P'u-man 4. Palaung 5. K'a-mu
II. Shan Family		1. Shan or Tai and its dialects
III. Chinese Family		1. Chinese
IV. Tibeto-Burman Family	(i) Tibetan Group	1. Tibetan or Pê or Pö, including probably some Hsi-fan dialects
	(ii) Hsi-fan Group	1. Hsi-fan 2. Mo-so or Na-shi 3. Lu-tzŭ or A-nung
	(iii) Lo-lo Group	1. Lo-lo or Nei-su or Ngo-su 2. Li-so or Li-su 3. La-hu or Lo-hei 4. Wo-ni, under which I include Ma-hei, K'a-to, Pu-tu, Pi-o, A-k'a, San-su, K'u-ts'ung and other tribes of southern Yün-nan
	(iv) Burmese Group	1. A-ch'ang or Nga-ch'ang 2. Ma-ru 3. La-shi 4. Zi or A-si
	(v) Kachin Group	1. Kachin or Ching-p'aw

Two tables of comparative vocabularies, one of the Mon-Khmer languages and the other of the Tibeto-Burman languages, will be found in the pocket of the cover of this book[1]. There are, however, some points

[1] Getting accurate vocabularies from uneducated tribesmen is a matter of some difficulty and there are doubtless some mistakes due to misunderstandings to be found in these vocabularies. The accurate transcription of the sounds of a language heard for the first time is also a matter of difficulty, not to say of impossibility. Luckily the minute differences of pronunciation very necessary for a conversational knowledge of the language are not absolutely essential for purposes of philological comparison.

which will require more elucidation, and these I will proceed to deal with.

Mon-Khmer Languages.

To take first the Mon-Khmer, it has long been recognised that the Annamese, the Cambodian or Khmer and the Mon or Talain languages belong to the same family. The connection has been very clearly brought out by Captain C. J. Forbes in his *Languages of Further India*, published in 1881. Logan was I believe the first to classify Palaung as a Mon-Khmer language, and as the Wa-Palaung group have been placed in the Mon-Khmer family by Dr Grierson in his *Linguistic Survey of India*, the correctness of this classification is not likely to be disputed. If more evidence were required it can be looked for in the tables of vocabularies referred to above.

With the Miao-Yao group, however, the matter is different. Most writers have put these languages in a class by themselves and considered that they have little or no connection with the speech of their neighbours in Yün-nan. They cannot certainly be classified with the Shan, the Chinese, or the Tibeto-Burman. Their likeness to other Mon-Khmer languages is, it must be admitted, not a very close one, but I think the resemblance is enough to warrant their inclusion in this family. It must be remembered that the Miao and Yao are only quite recent immigrants into Yün-nan, and that therefore for a period which may probably be measured by thousands of years they have had no close connection with the Wa-Palaung group or with the Annamese, the Cambodians, or the Talains[1]. We cannot therefore expect to find the same resemblance of language between Yao and Wa that we find between Palaung and Wa, spoken as these latter are by two tribes who still live close together, and who were probably one and the same tribe when they arrived at their present locality.

[1] It is true that many Miao and still more numerous Yao (or Man as they are there called) now inhabit the hills of Tong-king, but this comparative proximity with the Annamese-speaking dwellers in the Tong-king delta is only a matter of the last century or two.

COMPARISON OF MIAO AND YAO.

English	Miao[1]	Yao
Man (human being)...	Tan-neng, Tam-ming	To-mien
Son	To, T'am-t'ong	Ton
Eye	K'a-mwa, Mai	Moi
Hand	Apu	Pu
Cow.....	Nyaw, Nga	Ngong
Pig	Teng	Tong
Dog.....	Klie, Ko	Klu
Chicken	Ka, Kei	K'yi
Silver	Nya	Nian
River	Tiang	Tom
Paddy.....	Mblei	Blao
Cooked rice	Mao	Mai
Tree	Ndong	Ti-d'eang, Ti-ngiang
Fire.....	To	To
Wind	Chwa, Chiang	Jiao
Earth	Ta	Dao
Sun	Hno, Nai	Mo-noi
Moon	Hla	La
Big	Hlo	Tlo
Come	Ta	Tai
Go	Mong	Min
Drink	Ho	Hop
1	A, Yi	A, Yet
2	Ao	I
3	Pie, Po	Po
4	Pei, Plou	Plei
5	Pa	Pia
6	Chou	Chiu
7	Shiang, I	Sya, Ngi
8	Yi, Yik	Yet
9	Chio	Do
10.....	Ch'it	Chep

[1] The Miao words given in this column will not be found to correspond in every case with those in the Miao Vocabulary in the pocket of the cover of this book, as some have been taken from other Miao dialects.

The grammar of Sinitic languages, where words do not change their form, resolves itself into the order in which the words are used. In this respect the Miao and Yao languages agree with the Mon-Khmer family, the order being

Noun before adjective,
Thing possessed before possessor (in genitive),
Subject before verb,
Verb before object.

Of the Miao language fairly full vocabularies are available. One of these, taken by myself near the Burmese border, is given in the tables of vocabularies, and others are to be found in Hosie's *Three Years in Western China* and Clark's *Kweichow and Yün-nan Provinces.*

Of Yao much less material is to be got, and the words I have used, only numbering some seventy, have been taken from vocabularies collected by Captain H. B. Walker in the Southern Shan States, by Prince Henri d'Orléans in Yün-nan, and by M. Souchières in Kuang-hsi province. A comparison of this small number of words with the Miao vocabularies leads to the conclusion that about half the words in the two languages are connected. Some of these words are herewith given side by side. In one or two cases such as the words for "silver" and "moon" there may have been borrowings from Shan or Tibeto-Burman neighbours, but on the whole the words seem distinctive and do not appear to be common to other languages.

In the next table I have endeavoured to show the connection between Miao and Yao on the one hand and the Mon-Khmer family on the other. The list might have been made somewhat longer but I have only put down what seemed the most striking examples. The number of words compared were about 160 in the case of Miao, and only 70 in Yao. Considering therefore the small number of words available for comparison, this table may perhaps be considered enough to establish a *prima facie* case for the inclusion of the Miao and Yao languages in the Mon-Khmer family. It is of course possible that some of the resemblances may be accidental, but on the other hand a more extended knowledge of both

the Miao-Yao group and of the Wa-Palaung group will most likely lead to the discovery of the common origin of words which do not at first sight appear to be connected. It is to a great extent groping in the dark to compare languages of which one has no practical knowledge and of which even grammars and dictionaries are not available.

COMPARISON OF MIAO AND YAO WITH THE MON-KHMER LANGUAGES.

ENGLISH	MIAO	YAO	MON-KHMER, the name of the particular language to which the word belongs being put in brackets
Man (human being)	Nai Tam-ming	To-mien	Mnih (*Talain*)
Father	—	Tia I-tie	A-ta (*P'u-man*) Te (*Wa*)
Son	To T'am-t'ong	Ton	Kon-trom (*Talain*) Kuan-t'ao (*La*)
Head	Tao-hao K'o	Ngong	Kdap (*Talain*) Dau (*Annamese*) Ken (*La, Palaung*) An-ngwa (*P'u-man*)
Eye	Mai K'a-mwa	Moi	Muh (*Talain*) Mu-ti (*P'u-man*) Tre-muk (*Stieng*) Chre-mo (*Cambodian*) Mui (*Annamese*) Mat (*K'a-mu*) Mat (*Banar*)
Tooth	Hna	—	Ngek (*Talain*)
Stomach	Ka-plang	—	Pung (*Talain*)
Foot	—	Sao	Sho (*La*) Tsu-awng (*K'a-mu*)
Hand	Tie	—	Teh (*La* & *K'a-mu*) Tai (*Palaung, Annamese*) Toa (*Talain*) Ti (*Banar, Stieng* & *Riang*)
House	Chei	—	Cha (*La*)
Cow	Liao	—	Klaow (*Talain*)
Buffalo	Tu	—	Trao (*Annamese*)
Dog	Klie	Klu	Kle (*Talain*)
Gold	Ko	—	Kri (*La* & *Palaung*)
Iron	Hlao	—	Hlak (*Palaung*)

COMPARISON OF MIAO AND YAO WITH MON-KHMER LANGUAGES—*cont.*

ENGLISH	MIAO	YAO	MON-KHMER
Tree	Ndong	Ti-dheang Ti-ngiang	Tang-he (*Palaung*) Tang-ke (*Riang*) Tnom (*Talain*) Tom (*Stieng*)
Day	Hno	Mo-noi	Tngoa (*Talain*) Ngay (*Cambodian*) Nge (*Annamese*)
Night	Pang	—	Mbön (*Wa*) Ptawm (*Talain*) P'o-p'un (*La*) A-pu (*P'u-man*)
Water	Tlie	—	Daik (*Talain*) Dak (*Stieng* & *Banar*) Doi (*So*) Do (*Soue*) Tuk (*Cambodian*)
Water	—	Wom	Ung (*P'u-man*) Om (*K'a-mu* & *Danaw*) Em (*Palaung*)
Earth	Pa-tie	Dao	Ka-tai (*Palaung*) Ka-te (*K'a-mu* & *Riang*) T'ui (*P'u-man*) Dat (*Annamese*) Dey (*Cambodian*) Daik (*Talain*)
Wind	Chwa	Jiao	Kya (*Talain*) K'yal (*Cambodian*) Gio (*Annamese*)
Sky	—	Long	Me-long (*So*) Plan (*Palaung*) Mplin (*Lameit*) Pleng (*Riang*)
River	Tiang	To Tom	Ton-le (*Cambodian*) Ta (*P'u-man*)
Cooked rice	Mao	Mai	Ma (*K'a-mu*) Bai (*Cambodian*) Byu (*Danaw*)
Good	Jong	—	Juan (*P'u-man*)
Heavy	Hnyang	—	Nang (*Annamese*) Tngon (*Cambodian*)
Light	She	—	Shöng (*La*) Sral (*Cambodian*) Sa (*Talain*)
White	Klo	—	Kwu (*Talain*)
Two	Pi	—	Ba (*Talain*)

COMPARISON OF MIAO AND YAO WITH MON-KHMER LANGUAGES—*cont.*

ENGLISH	MIAO	YAO	MON-KHMER
Three	Pie	Po	Ba (*Annamese*) Bey (*Cambodian*) Pi (*Talain*) Pei (*Stieng* & *So*)
Four	Plou	{Plei} {Pie}	P'on (*Wa* & *Palaung*) Pon (*La* & *Talain*) Pun (*P'u-man* & *Danaw*) Bon (*Annamese*)
Five.....	Pa	{Pla} {Pia}	Pram (*Stieng*) Buon (*Cambodian*) Bon (*Annamese*) P'an (*Palaung*)
Six	Cho Tiu	Chiu·	Sao (*Annamese*) Sung (*So* & *Soue*) Trao (*Talain*) Taw (*Palaung* & *Lameit*) Twal (*Riang*) Tun (*Danaw*)
Nine	Chio	—	Chin (*Annamese*) Tchit (*Talain*)
Ten.....	Kao	—	Kao (*Wa* & *La*) Kö (*Palaung*) Skall (*Riang*)

Before quitting this subject one more point must be noticed. The Miao language appears to be on the whole nearer to the Talain than to any other language of the Mon-Khmer family. It is then a curious fact that the Miao call themselves Mhong and the Talains call themselves Mon. Without further evidence it would be a mistake to lay too much stress on the resemblance of name, for it might well be accidental. I do not know whether the Talains have any traditions as to how they came by their name or how long they have borne it.

In venturing to place the Min-chia among the Mon-Khmer languages, I am supported by the authority of Professor Terrien de Lacouperie, who considers that the Mon-Khmer origin of the language is still traceable amongst the mass of borrowed words which now constitute the greater part of the vocabulary of this race. Min-chia is undoubtedly the most puzzling language of Yün-nan to

classify. An examination which I have made of 100 words gives the following result:—

Of Chinese origin	42
Of Tibeto-Burman origin . .	33
Of Mon-Khmer origin . . .	23
Of Shan origin	2

This very mixed language is probably spoken by an equally mixed race. As the Min-chia have no near neighbours who speak languages of the Mon-Khmer type, it seems probable that their original tongue was of this family, and that it has since been much modified and altered by contact with their Tibeto-Burman neighbours, the Mo-so and Lo-lo, and that they have also borrowed very largely from the Chinese who have settled amongst them.

If questioned as to the origin of his race, the Min-chia will usually reply that his ancestors came from Nan-king. This probably refers to the large settlements of men from eastern China which are known to have been made in Yün-nan during the Ming dynasty. These Chinese probably to a great extent mixed with the original owners of the soil, and have largely imposed their language on them. Certainly the language at present spoken by the Min-chia seems to consist very largely of corruptions from the Chinese, and they have even gone to the length of adopting the Chinese order of words, which in the position of the adjective and the genitive differs from that of the Mon-Khmer languages. The order as deduced from such expressions as *Man* (*male*), *Woman*, *Hair*, *Chicken's egg*, *Ride a horse* given in the table of vocabularies is

Adjective before noun,
Possessor before thing possessed,
Subject before verb,
Verb before object.

Whether a language of which three-quarters of the vocabulary and half the grammar belong to other types of speech, can still rightly be classed in the Mon-Khmer family is of course open to doubt, and must to some extent be a matter of opinion. It would certainly be difficult to classify it in any other family, and the only alternative

COMPARISON OF MIN-CHIA WORDS WITH WORDS OF MON-KHMER LANGUAGES.

ENGLISH	MIN-CHIA	MON-KHMER, with name of particular language in brackets
Father	A-te	I-tie (*Yao*) Te (*Wa*) A-ta (*P'u-man*)
Head	T'e (paw)	Tao (hao) (*Miao*) Dau (*Annamese*) Kdap (*Talain*)
Eye	Ngwe- (su)	Ngai (*Wa, La, Palaung & Riang*)
Trousers	Kwa-yo	Kla (*Wa*) K'o (*Cambodian*)
Pig	Te	Teng (*Miao*) Tong (*Yao*)
Copper	Hwe	Hlui (*Talain*)
Paddy	Sö	Srom (*Talain*) Srau (*Cambodian*)
Hot	U	U (*P'u-man*)
Cold	Kö	Kwet (*Wa*) Kwat (*La*) K'a (*P'u-man*) Kaw (*Palaung*)
Dry	Ka	K'wa (*Miao*) Kru (*Wa*) K'aw (*P'u-man*) K'o (*Annamese*)
One	A	A (*Yao*)
Two	Gaw	Kar (*Riang*)

ENGLISH	MIN-CHIA	MON-KHMER
Speak	Ga	Ha (*Miao*) Ska (*Talain*)
Fly	Fu	Pu (*Wa*) P'wa (*P'u-man*) Pö (*Palaung*) Paw (*Talain*)
Stand	Djö	Ch'o (*Cambodian* Jong (*Wa*) Jang (*Palaung*)
Tie	Ba	Bak (*Palaung*) P'uk (*La*) P'yow (*Wa*) Buok (*Cambodian*) P'ö (*P'u-man*)
Pound	Te	Toa (*Miao*) Tuh (*Palaung*) T'u (*P'u-man*) Tang (*Wa*) Ta (*La*)
Cook	Dju	Cho (*Miao*)
Pierce	Ch'a	Chawk (*La*) Ch'u (*P'u-man*)
Be hurt	Sö	Sö (*Wa*) Sao (*La*) Shu (*P'u-man*) Saiow (*Palaung*) Su (*Riang*)

seems to be to put it entirely by itself. It seems, however, probable that M. de Lacouperie's opinion that the language is of Mon-Khmer origin is correct, and in the accompanying vocabulary I have given some words for comparison. Besides the Min-chia vocabulary given in the tables, other lists of words are available from Prince Henri d'Orléans' *Du Tonkin aux Indes*, and from Mr Clark's *Kweichow and Yün-nan Provinces.*

Of the languages which I have classified as Wa-Palaung the only one that calls for notice is the P'u-man. Many travellers have considered the P'u-mans to be a Shan-speaking race, and there is no doubt that many of this tribe do speak dialects of Shan. But I have also come across P'u-mans who had no other language but Chinese. The fact seems to be that they have split up very much into small communities, and have in many cases become so isolated that they have adopted in their entirety the languages of their more powerful neighbours. The vocabulary given in the tables was taken by me from P'u-mans living in the valley of the Mekong, about 25 miles N.E. of Yün Chou. There were considerable numbers of this race in that part of the country, and they had no neighbours who spoke languages anything like their own. I think therefore that this vocabulary may be considered as a genuine example of the speech of the P'u-man race.

The Mon-Khmer vocabularies which will be found in the pocket of the cover of this book were obtained in the following localities, and were taken down by myself when not otherwise stated.

The Miao from near Taw-nio, just within the border of the Shan States, lat. 23° 40′, long. 98° 45′.

The Yao from the Southern Shan States taken by Captain H. B. Walker, with one or two words added from M. Souchières's vocabulary taken in Kuang-hsi province near the Tong-king border.

The Min-chia from a native of Yün-lung Chou, lat. 25° 50′, long. 99° 20′.

The Wa from near Mêng-mêng, lat. 23° 25′, long. 99° 50′.

The La from Taw-nio, lat. 23° 40′, long. 98° 45′.

The P'u-man from the village of Hsiao-ch'in in the Mekong valley, lat. 24° 45′, long. 100° 25′.

The Palaung from the Nam-kham district of the Northern Shan States, about lat. 23° 50′, long. 97° 40′.

The K'a-mu from near Chieng Kong in French Laos, about lat. 20° 15′, long. 100° 25′.

The Talain, Annamese, and *Cambodian* from published dictionaries.

Shan Languages.

Of the Shan or Tai family I do not propose to give any vocabularies. The language can be studied in its Siamese, its Shan, or its Lao form from published books, and the more westerly dialects have been dealt with by Dr Grierson in his *Linguistic Survey of India.* The Shan language as spoken in Yün-nan does not present sufficient divergency from well known types as to make it worth while for philological purposes to give vocabularies.

Differences of dialect undoubtedly exist, but they are not sufficiently marked to make the language unintelligible to Shans from other countries. The following very incomplete notes as to these dialects may be of interest.

One dialect is spoken in all that part of Yün-nan which lies between the Burmese frontier and the Salween. Its principal peculiarities are the turning of the aspirated *k'* sound (*hk*) of the Shan States into a guttural like the German *ch*, the use of *f* instead of the aspirated *p'* (*hp*), the turning of the unaspirated *s* into *ch*, and the constant confusion of *l* and *n*, the latter being usually turned into the former. Besides this a certain number of words are used that are strange to the native of the Shan States, and some Chinese expressions have been adopted. This dialect sounds harsh and unpleasant to the ear compared with the speech of the Shan States.

Between the Salween and the Mekong, in the states of Kêng-ma and Chên-k'ang (Möng Cheng), a dialect is spoken which approximates very closely to that of Theinni and the Shan States in general. The harsh gutturals of the west of the Salween disappear, and the only peculiarity

I noticed is a tendency to turn the sound *ai* into *oi*, thus *kai*, *far*, becomes *koi*.

East of the Mekong, in Wei-yüan (Möng Waw), Mêng-pan, and Mêng-ka, another change of dialect takes place, but of this and the other Shan dialects of Yün-nan I am not able to give any details.

Chinese Languages.

The Chinese of Yün-nan is the Mandarin dialect, and it is spoken with sufficient accuracy to be quite intelligible to a native of Nanking or Peking. It is therefore of no value for philological purposes.

Diversity of dialect of course exists, but natives of the province have no difficulty in making themselves understood throughout Yün-nan. The only possible exception to this is the dialect spoken in the immediate neighbourhood of the provincial capital. Here a very uncouth speech prevails, possibly the result of a foreign accent derived from the original Lo-lo inhabitants of the Yün-nan Fu plain. Another dialect peculiar to one locality is that of the Yung-ch'ang Fu district. This is prevalent in a good deal of the country between the Salween and the Mekong. It is, however, not a mere rustic *patois*, but approaches more nearly than the speech of perhaps any other part of Yün-nan to the standard of pure Mandarin. The inhabitants of Yung-ch'ang claim that they originally came from the neighbourhood of Nanking, and that they have preserved the language of their forefathers unchanged.

To those interested in the study of local dialects of Chinese the following notes on the language spoken in the districts of T'êng-yüeh T'ing and Lung-ling T'ing may be of use. These districts are situated in the extreme west of Yün-nan and comprise most of the country between the Burmese border and the Salween. This is the only dialect of which I am able to give details.

Pronunciation.

S and *ts* when they are followed by *i* or *ü* do not as in Pekingese change into *hs* and *ch* respectively, but retain their original pronunciation as in the southern Mandarin.

Words of this class are pronounced as spelt in Williams' Dictionary.

H and *k*, however, followed by *i* or *ü* change into *hs* and *ch* respectively as in Pekingese.

The final *ng* when preceded by *e* or *i* changes into *n*, thus—

Lêng is pronounced *lên*,
Ping „ „ *pin*.

An exception to this rule must, however, be made in the case of the syllables *fêng*, *mêng*, and *pêng*. Here the *ê* is pronounced as a *u* or more perhaps as a long *o*, and the sound of the *ng* is retained, thus—

Fêng is pronounced *fōng*,
Mêng „ „ *mōng*.

The sound of the modified *ü* becomes *i*, thus—

Lü is pronounced *li*,
Chü „ „ *chi*,
Yün „ „ *yin*.

When the *ü* is followed by *a*, the *a* has more the sound of an *e*, thus—

Chüan is pronounced *chien*.

The syllables *yüan* and *yüeh* are undistinguishable in sound from *yen* and *yeh* respectively.

U before *o* is not sounded, thus—

Shuo is pronounced *sho*,
Huo „ „ *ho*.

Tones.

The first tone is what its Chinese name *shang-ping* implies—a high even tone.

The second tone is a short jerked tone.

The third tone is an emphatic tone and has nearly the sound of the fourth tone in Pekingese, but is pronounced with a more steady emphasis and less jerk.

The fourth tone has the sound of the third tone in Pekingese.

The fifth tone has the same sound as the second tone, both being pronounced in a short jerked tone, thus—

Ho, *river*, is undistinguishable in sound from *ho* (*hoh*), *harmony*.

Local pronunciations of words.

Chiao, foot, is pronounced *chio.*
Chieh, street or *market,* is pronounced *kai.*
Chieh or *chiai, boundary,* is pronounced *kai.*

Local words.

Nei[1] is used instead of the genitive *ti,* and is also used after verbs in the present or future tense, thus—

T'a nei ma, his horse.
T'a ch'i (ch'ü) nei, he is going.

The following local words are in common use:—

Ka, bad, worthless—used of men or things.

Ts'uan, quick.

Cha-shih, very.

Other provincialisms may exist, but on the whole the divergencies from the standard Mandarin dialect are probably smaller than are to be found in most of the local dialects of China. Many of the peculiarities noticed above have a very wide range over western China, and possibly over other parts of the country.

Tibeto-Burman Languages.

That the languages which I have placed in the table of Tibeto-Burman vocabularies belong to that family will not be questioned, but their arrangement in groups may be open to criticism or difference of opinion.

The Tibeto-Burman family is so large that some division into groups seems necessary. In the Tibetan group I have placed a language which seems to be merely a dialect of the speech of Lhasa with the addition of certain local words; a more intimate knowledge of the language of the Tibetans of Yün-nan would probably disclose an

[1] The small number under the word denotes its tone.

even closer connection with the standard dialect of the Tibetan tongue.

In the Hsi-fan group I have included those languages which seem to be the result of Tibetan influence on tongues which were originally more of the type of the Lo-lo or of some other group of the Tibeto-Burman family.

Amongst the Lo-lo I have classed the La-hu, the Li-so and the Wo-ni, all three of which can scarcely be considered as more than dialects of some original Lo-lo tongue.

In the Burmese group I have placed four languages which are spoken in the Kachin Hills near the Burmese frontier of Yün-nan. These seem to have a distinctly closer connection with Burmese than with any Lo-lo language. For comparison with these I have given the P'ön—a rapidly dying language which is spoken on the part of the Irrawaddy immediately north of Bhamo—and Burmese both in its written and spoken form.

The Kachin group is only represented by one language —the Kachin or Ching-p'aw.

The vocabularies given in the table of Tibeto-Burmese languages were obtained in the following localities, and were taken down by myself, except when otherwise stated.

The *Written Tibetan* and *Standard Spoken Tibetan* from Henderson and Amundsen's book.

The Yün-nan Tibetan near Chung-tien, lat. 27° 50′, long. 99° 45′.

The Lu-tzŭ and Mo-so from M. Desgodins' vocabulary in *Bulletin de la Soc. de Géog. de Paris*, 6th series, vol. v (1873), p. 144.

The P'rü-mi Hsi-fan from near Mi-li, lat. 28° 10′, long. 100° 50′.

The Mu-nia (*Menia*) *Hsi-fan* from the village of No-po on the Ya-lung Ho, lat. 28° 20′, long. 101° 40′.

The Ssŭ-ch'uan Lo-lo from the village of Ta-shih-p'êng, lat. 26° 25′, long. 102° 30′.

The Mêng-hua Lo-lo from the village of Ho-ti near Mêng-hua T'ing, lat. 25° 10′, long. 100° 5′.

The Li-so from the Kachin Hills.

The La-hu from the village of Phaya Kili in northern Siam, lat. 20°, long. 99° 10′.

The A-k'a from a vocabulary given in the *Upper Burma Gazetteer*, probably taken in the Shan state of Keng Tung.

The Ma-hei from the neighbourhood of Ssŭ-mao, lat. 22° 50′, long. 101°.

The A-ch'ang from Hu-sa (Ho-hsa), lat. 24° 30′, long. 97° 55′.

The Zi, Ma-ru, and La-shi from the Kachin Hills.

The Kachin from near Sadon in the Kachin Hills, lat. 25° 25′, long. 97° 55′.

The P'ön from a native of the "third defile" of the Irrawaddy between Bhamo and Sen-bo, about lat. 24° 30′, long. 97° 5′.

Some of my own vocabularies have been used in the *Upper Burma Gazetteer*, part i, vol. i, and the same volume contains other Tibeto-Burman vocabularies. Valuable vocabularies of Hsi-fan and Lo-lo are also given by Baber in the *Royal Geographical Society Supplementary Papers*, vol. i, p. 73.

In the written Burmese I have put *ts* and *ts'* for *s* and *s'* (*hs*). It seems probable that this was the original pronunciation of these two letters, and indeed in Judson's grammar the *ts* is given as the modern pronunciation. It is also possible that they may have been pronounced *ch* and *ch'*, as these sounds, where they occur in Pali words, are spelt *s* and *s'* (*hs*) in modern Burmese. For the spoken sound of *th* I have adopted *s'* as the most likely equivalent. Judson says that this sound was originally a sibilant: it is possible also that it may have been an *sh*. I have in all cases used the comma above the line after a letter to indicate that it is aspirated, instead of the official spelling which places an *h* before the letter[1].

[1] In the Government system of transliterating Burmese the *h* is placed before a letter to indicate an aspirate which is really sounded after the letter. The reason for this doubtless is that the English sounds of *th* (as in *thin*) and of *sh* also exist in Burmese. For the aspirated *t* and *s* it was therefore impossible to use *th* and *sh*. A way out of the difficulty was found by placing the *h* before the letter it qualifies, and the same system has for the sake of uniformity been carried out with *k* and *p*. This has, however, landed them in another difficulty, for there are some letters in Burmese which can have an *h* sound *before* them, so that the sounds *ht*, *hs*, *hk*, and *hp* have to be pronounced with the *h* following the other letter, and the sounds *hl*, *hm*, and *hn* with the *h* preceding the other letter. The official system, however, has certainly the advantage of calling attention to the aspirate, whereas the comma above the line is apt to be omitted by careless writers and printers.

(*c*) The connection between the different families of Sinitic languages.

The Sinitic languages have two peculiarities which distinguish them from the other languages of the world. They are monosyllabic and isolating. That is to say that every original word of the language is a monosyllable, and that words do not change their form. That a number of languages, spoken by races with a physical resemblance to each other and inhabiting the same part of the globe, should also have such marked linguistic peculiarities would be almost enough without other proof to show their mutual connection.

Beyond this, however, actual resemblance of vocabulary between the different families of Sinitic languages is by no means wanting. In published books on Chinese, Siamese, Shan, Burmese, and Tibetan we have ample material for a comparison of three of the great families, the Chinese, the Shan, and the Tibeto-Burman. That the result of such a comparison discloses a fairly close original connection between these three families is hardly open to question. Were we able to get at the languages spoken by the ancestors of these races thousands of years ago, it would probably be difficult to find words in any of these families which are *not* connected with words of the other two.

It is generally admitted now that the words of the Sinitic languages as spoken at the present day have been much shortened by a process of phonetic decay. A comparison of written Tibetan or Burmese with the present spoken languages, or of the old Chinese sounds with the modern Pekingese, goes to prove this. Words that originally began or ended with two or three consonants together have been whittled down to words of two or three letters: *brgyad* in written Tibetan is now pronounced *gye*, *brjod* has become *jod*, *lchags* has turned into *chag* or *cha*. In Chinese the modern Mandarin dialect has lost the final *k*, *t*, and *p* which are still retained in some of the older spoken dialects.

That the original ancestors of the Sinitic languages may have been polysyllabic, as contended by Professor de Lacouperie, seems probable. However this may be, their modern representatives are now monosyllabic or

nearly so. There is, however, a great difference between different languages in the degree of decay which has taken place. In the written Tibetan and in some of the Hsi-fan and Lo-lo dialects words beginning with two or three consonants are fairly common, in spoken Burmese and Siamese they are comparatively rare, while in Shan and Chinese they have disappeared altogether[1].

It is those languages which still retain the initial double consonants which are of most value for showing the connection between words which would otherwise appear unlike. In the process of phonetic decay, the initial double consonant has been simplified into a single consonant, but it has often happened that one language has preferred one of these consonants and another sister-language has preferred the other. The result naturally is that two words which really have a common origin become totally dissimilar in sound.

To take a simple instance. The Shan word for boat is *hö*, the Siamese is *rua*. Now as Shan and Siamese are merely two dialects of the same tongue, and as there is a regular series of words in which the Shan *h* is replaced by the Siamese *r*, there can be no doubt whatever that *hö* and *rua* have the same origin. The process by which two such dissimilar sounds as *h* and *r* should be confused is not at first sight clear. The explanation, however, is simple. It is not a case of phonetic change from *h* to *r* or from *r* to *h*, but is the result of derivation from a common ancestor-word beginning with a double consonant, of which the Shans have preferred to retain one and the Siamese the other. If we turn to written Tibetan we find the word for boat is *G'ru*. The *g'* turns easily into a *k'* and the *k'* into an *h*. The original word before Shan and Siamese separated into dialects was doubtless *hrö* or *hrua* or some such sound. As an additional proof we have the Burmese word *hle* which is practically the same as *hrö*, for in nearly all the Sinitic languages *r* turns easily into *l*. To follow the word a little further, the Kachins and many other members of the Tibeto-Burman family have dropped the initial *h*. Thus the Kachin *li* is shown to have a common

[1] Such sounds as *ng* or *sh*, though written by us with two letters, cannot be considered as genuine double consonant sounds

origin with the Shan *hö*, though outwardly there is no resemblance between the two words.

In the same way the Shan for *to love* is *hak*, the Siamese is *rak*. In written Burmese we have an older form *krok*. The Shans have taken one consonant slightly changed, and the Siamese have preferred the other.

It is of course not contended in either of these cases that the Shan and Siamese words are derived directly from Tibetan or Burmese, but merely that in the two latter languages older forms of some common ancestor have survived.

To continue the comparison of Shan and Siamese, we find *hot* is *hawn* in Shan and *rawn* in Siamese. Here the Palaung *hrang* gives the clue to the connection. *Field* is *hai* in Shan and *rai* in Siamese. In K'a-mu we find the word in the form of *hre*.

In both of these last two instances it is conceivable that the words may have been borrowed by Palaung and K'a-mu respectively from Shan or Siamese. This, however, would not affect the argument. It would be proof that the original word at the time it was borrowed had the initial double consonant *hr*.

The common derivation of apparently dissimilar words from older words beginning with double consonants is not, however, confined merely to the connection of Shan with Siamese. It is a principle which has I believe a very wide application throughout the Sinitic languages. Want of leisure has only allowed me to make a very superficial study of this subject, but the following instances will illustrate my meaning.

The Shan for *yellow* is *löng*, the Chinese is *huang*. The Siamese *hluang* supplies the connecting link.

In Talain the word for *stone* is *tmaw*, in Cambodian *tma*. Annamese retaining the first of these consonants has *da*, while Palaung retaining the second has *mao*.

In Karen the word for *bone* is *akrwe* or *krwi*. The Chinese retaining the first consonant has become *ku*, written Burmese retaining the second is *aro*.

Some rather more complicated derivations may well be given in the form of genealogical tables, the names of the languages being put in brackets.

Mrul, wind (Ssŭ-ch'uan Lo-lo)
Brum, „ („ another dialect)

Mp'yu (Mêng-hua Lo-lo)
Mbong (Kachin)

Mu (Lo-lo, another dialect)
Bong (Old Chinese)
Fong or *Fêng* (Chinese)

Rlung (Written Tibetan)
Lung (Spoken „)
Lom (Shan)
Lai (Zi)
Le (Burmese)

Without older forms to refer to, it would be difficult to see the connection between the Lo-lo *mu*, the Chinese *fêng*, and the Burmese *le*. It may be as well to repeat that I do not by any means mean to imply that the words above are derived from each other in the order they are placed, but merely that in the languages placed at the top more archaic forms of the original word have survived than in the languages at the bottom.

K'rawk, six (Written Burmese)
Ghlok, „ (Chung-chia Shan)

K'o (Mu-nia Hsi-fan)
K'u (Lo-lo)
Hu (Lo-lo, another dialect)
Hok (Shan)

Ruk (Haka Chin)
Lok (Siyin Chin)
Lok (Tong-king Shan)
Liu or *Lu* (Chinese)

Ch'auk (Spoken Burmese)
Sot or *Saw* (Karen)

Ch'ro (P'rü-mi Hsi-fan)
D'rug (Written Tibetan)
Dro (Ku-tsung)
Tuk (Spoken Tibetan)

Phonetic changes have here taken place, as well as the splitting of the initial double consonant. The *ḱ* turning into a *ch* is a well-recognised fact in many Sinitic languages, and the *kr* and *gr* of written Tibetan always become *tr* and *dr* in the spoken tongue of Central Tibet. In this case the change has taken place before Tibetan became a written language, about the sixth century A.D., and for the oldest existing form of the word we have to go to written Burmese. It is possible that the P'rü-mi Hsi-fan *ch'ro* shows the intermediate stage by which *kr* has become *tr* in Tibetan and finally simply *t*.

Ljrö, four (Ssŭ-ch'uan Lo-lo)
Jro, „ (A Hsi-fan dialect)

Lö (Lo-lo, another dialect)
Li (Li-so)
Le (Burmese)

Jei (P'rü-mi Hsi-fan)
Zhi (Spoken Tibetan)
Zö (Mu-nia Hsi-fan)
Ssŭ (Chinese)
S'i (Shan)

Kyawng, river (Written Burmese)
Kraung, „ (Taung-thu)

Kawng (Zayein Karen)	*Rawng* (Palaung & Riang)
Hawng (Shan)	*Lawng* (Danaw)
Ho (Chinese)	*Law* or *Lö* (Karen)

While the splitting of initial consonants has thus made the common origin of many words almost unrecognisable, great alterations in pronunciation have also been effected by gradual phonetic change. Some of these are still easily recognisable. It requires little effort of imagination to see that the northern Shan *ngo, a cow*, is the same as the southern Shan *wo*, and the Siamese *bo*.

When we come, however, to such words as the Burmese for *long*, which in the written language is *hrañ* and in the spoken tongue *she*, the connection is by no means obvious at first sight. The final consonant has here entirely disappeared. The dropping of final nasal consonants, with or without a modification of the vowel, is very common in Sinitic languages. It is still going on in Kachin, P'ön, and some of the Lo-lo dialects, while in some parts of China where the Mandarin dialect is spoken, such words as *shang* and *kuan* have become *sha* and *kua*. In Burmese there is a long series of words where the final *añ* of the written language has become *i* or *e* in modern speech.

This leaves us with the word as *hre*, but the letter *r* is now pronounced as a *y* in Burmese, and *hye* easily turns into *she* by a phonetic change which is also found in Chinese, where *hing* and *hien* have become *hsing* and *hsien* in modern Pekingese, the *hs* being used to transliterate a sound which closely resembles the Burmese *sh*. Without the written form of the Burmese it would have been impossible here to identify the spoken word *she* with the Tibetan *ring*.

Where such a great change can take place as that from *hrañ* to *she* in a few centuries of a language's history, a change only brought to light by the accident of the existence of the word in a written form—it is obvious that in many cases words must have been changed from their original form beyond all recognition. Moreover, as the very large majority of the Sinitic languages have never had any written character, the intermediate steps which have led

to these phonetic changes must in many cases have been lost, and the chance of recognising the original connection of words has thus disappeared.

The Connection between the Mon-Khmer Languages and the other Sinitic Languages.

That the Chinese, the Shan, and the Tibeto-Burman families are more closely connected with each other than with the Mon-Khmer family is no doubt true. It seems established that the Mon-Khmer-speaking races split off from the original stock at a very remote period and inhabited Indo-China and a large part of China before the first incursions of the Chinese or the Tibeto-Burman-speaking races. This fact which seems to rest on a fairly satisfactory historical basis would be enough to account for wide divergency in language.

Now the Mon-Khmer languages have the same distinguishing peculiarities as the Chinese, Tibeto-Burman, and Shan languages, and they are spoken by people with a strong physical resemblance to the races who speak these latter languages. The presumption that they are from the same original stock is therefore overwhelming.

In vocabulary, however, the modern representatives of the Mon-Khmer languages and the other Sinitic languages are so far apart, that it has been sometimes assumed that no connection can be traced. Doubtless owing to phonetic change and the splitting of initial double consonants many words have been altered beyond all hope of recognition, but a systematic study of the subject would, I believe, reveal many unsuspected resemblances.

It is a subject which I have found no time to pursue with the thoroughness which it demands, but the following desultory observations may be of interest.

The word for *sun*:—

Mon-Khmer	Tibeto-Burman
Tngay (Talain)	*Nyi-ma* (Tibetan)
Se-ngai (Palaung)	*Ngi-me* (Mo-so)
Si-ngai (Wa)	*Nye-dzö* (Lo-lo)
Nyi (P'u-man)	*Nyi-mav* (A-ch'ang)
Mo-noi (Yao)	*Mo-ni* (La-hu)
Hno (Miao)	*Ne* (Burmese)

The word for *eye*:—

Mon-Khmer	Tibeto-Burman
Mot (Talain)	*Myak* or *Myet* (Burmese)
Mat (K'a-mu)	*Myet-sao* (Lo-lo)
Ka-mwa (Miao)	*Myaw* (Zi)
Me (Yao)	*Mik* (Tibetan)
Kon-mat (Annamese)	*Me-si* (La-hu)
Ngai (La, P'u-man, Palaung)	*Nie* (Hsi-fan)
	Nie-sö (Ssŭ-ch'uan Lo-lo)
	Ne-nö (A-k'a)

The word for *cow*:—

Mon-Khmer	Other Sinitic languages
Bo (Annamese)	*B'a* (Tibetan)
Boi (La)	*Wa* (P'ön)
Im-po (K'a-mu)	*Nwa* (Burmese)
Ngong (Yao)	*No* (A'ch'ang)
Nyaw (Miao)	*Ngo* or *wo* (Shan)
Moi (Wa)	*Niu* (Chinese)
Mak (Palaung)	*Nu* (La-hu)
	Maw (A-k'a)

The word for *fish*:—

Mon-Khmer	Tibeto-Burman
Ga or *Ka* (Palaung)	*Nga* (Burmese, Kachin, La-hu,
Ka (Talain, Annamese, Wa, La)	A-k'a)

The word for *tiger*:—

Mon-Khmer	Tibeto-Burman
K'la (Cambodian)	*Ha-la* (Ma-hei)
Kla (Talain)	*Ka-lat* (P'ön)
La-wai (Palaung)	*Kya* (Burmese)
Ra-woi (Wa)	*Law* (A-ch'ang, Ma-ru & Zi)
	La-pa (Lo-lo)
	La-ma (Li-so)

The word for *house*:—

Mon-Khmer	Tibeto-Burman
K'ang (K'a-mu)	*K'ang-pa* (Tibetan)
Kan (P'u-man)	

The word for *horse*:—

Mon-Khmer	Tibeto-Burman
Im-prang (K'a-mu)	*Mrang* (Burmese)
Im-byang (Palaung)	*Ku-mrang* (Burmese)
Brong (La)	*Myang* (Zi)
Brum (Wa)	*Mhang* (A-ch'ang)

It is just possible that in this last instance the word has been borrowed from Burmese by the Las, Was and Palaungs. These three tribes, however, though they live within Burmese territory have little connection with the Burmese, and it would be difficult to find a La or Wa who had ever heard the Burmese language spoken. Much

more is this the case with the K'a-mus who live in northern Siam and French Laos.

The word for *boat*:—

MON-KHMER	TIBETO-BURMAN
Klung (Talain)	*G'ru* (Tibetan)
Ka-le (Palaung)	*Rlo* (Lo-lo)
	Hle (Burmese)
	Law (A-k'a)

The word *boat* is very apt to be borrowed from other languages by tribes who live remote from navigable rivers. It is possible therefore that the Palaung *ka-le* is a corruption of the Burmese *hle*. The Talains, however, certainly live in a country where boats are used, and the resemblance of their word to the Tibetan is remarkable.

In the following words there seems to have been a splitting of the initial double consonant.

The word for *dog*:—

Ksö (Northern Lo-lo)

MON-KHMER	TIBETO-BURMAN, &C.
Ts'o (La)	*K'ö* (Lo-lo)
Sao (Palaung)	*Kou* (Chinese)
Saw (Wa & K'a-mu)	*K'we* (Burmese)
	Ch'ö (Mi-li Hsi-fan)
	Ts'ö (Yün-nan Tibetan)

The word for *hair*:—

Skra (Written Tibetan)

MON-KHMER	TIBETO-BURMAN
Klö (K'a-mu)	*Kya* (Yün-nan Tibetan)
Hök (La)	*Ka-ra* (Kachin)
Hük (Palaung)	*Sa-kaw* (A-k'a)
Gok (Talain)	*Che-k'u* (Ma-hei)
Sak (Cambodian)	*Sö* (La-hu)
Tok (Annamese)	*Sam* (Zi)
	S'an (Spoken Burmese)
	Tra (Spoken Tibetan)

The word for *gold*:—

G'ser (Written Tibetan)

MON-KHMER	TIBETO-BURMAN
K're (Wa)	*Hrwe* (Written Burmese)
K'ri (La)	*Ha* (Mo-so)
K'yi (Palaung)	*K'ang* (Ma-ru)
Kyi (Min-chia)	*K'üng* (Zi)
Ko (Miao)	*Ser* (Spoken Tibetan)
Sam (Yao)	*Shwe* (Spoken Burmese)
	Se (A-ch'ang)
	Su (A-k'a)
	Shüng (La-shi)
	Shain (P'ön)

The word for *road*:—

Klung (Talain)

MON-KHMER	TIBETO-BURMAN
Ka-ra (Wa)	*Ga* (Ssŭ-ch'uan Lo-lo)
Kra (La)	*Ka-ma* (Ma-hei)
	K'ar-hi (P'ön)
	Lam (Tibetan, Burmese, Kachin)

The word for *husked rice*:—

Sngu (Talain)
Sa-k'ao (Mêng-hua Lo-lo)
Sa-k'a (La-hu)

MON-KHMER	TIBETO-BURMAN
Nk'u (P'u-man)	*Ngö* (Yün-nan Tibetan)
N-gow (Wa)	*M-ku* (Kachin)
La-kow (Palaung)	*S'an* (Burmese)
Ang-ka (Cambodian)	*Ts'en* (A-ch'ang)
Un-k'o (K'a-mu)	*Shin* (Zi)
Gao (Annamese)	
Kao (La)	

The word for *grass*:—

Rtswa (Written Tibetan)
Smau (Cambodian)

MON-KHMER	TIBETO-BURMAN
La-si (P'u-man)	*Shö* (Mêng-hua Lo-lo)
Rip (Wa)	*Su* (Yün-nan Tibetan)
	Rju (Mu-nia Hsi-fan)
	Mrak (Written Burmese)
	Man (La-shi)
	Maw (La-hu)
	Mo (Li-so)

The word for *fire*:—

Mu-to (Ssŭ-ch'uan Lo-lo)
Kmot (Talain)

MON-KHMER	TIBETO-BURMAN
Ngu (Wa)	*Mi* (Burmese, Zi, Maru, La-shi)
Ngao (P'u-man)	*Me* (Tibetan)
To (Yao)	*Nyi* (Yün-nan Tibetan)
Shwa-to (Miao)	*A-mi* (La-hu)
	Ta-mi (P'ön)
	Te-ni (Lu-tzŭ)
	A-taw (Mêng-hua Lo-lo)
	A-t'o (Li-so)

The word for *earth*:—

Mu-dö (Mo-so)
Mi-di (Mêng-hua Lo-lo)
Mdö (Ssŭ-ch'uan Lo-lo)

MON-KHMER	TIBETO-BURMAN
Dat (Annamese)	*Ta-myi* (Kachin)
Dey (Cambodian)	*Mre* (Written Burmese)
T'ui (P'u-man)	*Mi* (La-shi)
Ti (Talain)	*Mi-na* (Li-so)
Ka-tai (Palaung)	
Ka-te (K'a-mu)	
Pa-tie (Miao)	

(*d*) The geographical distribution of the languages of Yün-nan and western Ssŭ-ch'uan.

The main fact that stands out about the geographical distribution of the languages of this part of western China and Indo-China is that the Tibeto-Burman languages are spoken in the north, and the Shan and Mon-Khmer languages in the south. The dividing line seems to be about the 25th parallel of latitude.

North of this line the languages spoken are almost solid Tibeto-Burman, the only notable exception being the Min-chia whose speech is probably, though not perhaps certainly, of the Mon-Khmer type. South of the 25° line we soon begin to come to speakers of Shan, and also to speakers of Palaung and other Mon-Khmer tongues.

It cannot, however, be said that the Tibeto-Burman languages disappear south of lat. 25°, for among the Shans and Mon-Khmers there are Lo-los, Wo-nis, La-hus, and A-k'as stretching down even into northern Siam, and forming in some districts a large part of the population. In Siam the 20th parallel of latitude is perhaps the southern border of the Tibeto-Burman languages. Below that I believe that languages of the Shan and Mon-Khmer type are almost exclusively spoken.

Turning eastward we find the neighbouring provinces of Kuei-chou and Kuang-hsi largely peopled by men of Shan, Miao, and Yao race, but not, as far as all information goes, by any Tibeto-Burman speaking tribes.

We thus find the Tibeto-Burman speaking races occupying almost entirely the country north of lat. 25° and stretching northwards right through Tibet. Southwards numerous offshoots of this race have spread as far as lat. 20°, but eastwards they do not seem to extend much beyond long. 105°. Westwards they are found throughout Burma, and in all the eastern parts of the Himalayas, even as far west as the part of this range which overlooks the Punjab. In Burma they have spread further south than in Siam, but in this connection it must be remarked that the inhabitants of much of Lower Burma are really Talain by race and that the Burmese language has only come into general use there in the last 100 years.

The Lo-los, La-hus, Li-sos, Kachins and other Tibeto-

Burman speaking tribes always now move southward in their migrations. Taking with this fact the limited amount of their extension to the south and the east, it may probably be inferred that their original home was in the Himalayan ranges to the north and north-west of the present habitat of the most important branches of their race.

An interesting fact in connection with the Tibeto-Burman languages is the very close connection that exists between the speech of the Ma-rus, Zis, La-shis, A-ch'angs and P'öns on the one hand and the Burmese on the other. This is not the general likeness that the languages of the Lo-los and other Tibeto-Burman tribes have to Burmese, but is sufficiently close to warrant the belief that at some not very distant period these races spoke one tongue.

This fact may I think throw some light on the disputed point as to how the Burmese reached their present country. For beginning with the P'öns who live on the Irrawaddy just north of Bhamo we have a regular line of Zis, Ma-rus, and La-shis leading up to the eastern branch of the Irrawaddy. Above the confluence, the eastern branch is in fact almost entirely inhabited for a considerable distance by Ma-rus and La-shis while on the western branch these tribes do not, I believe, exist. The inference is that the Burmese came down the eastern branch of the Irrawaddy and that these tribes are stragglers left behind in the southerly migration of the main body of the race.

To come now to the Shan and Mon-Khmer speaking races, we have here tribes who for the most part do not extend north of lat. 25°, but are found in all the country south of this line right down to the sea. Westward the Palaungs stretch to about long. 97°, but west of this both the Shan and Mon-Khmer speaking races are only found in small and scattered communities, such as the Shans of the Chindwin, the Kamti Shans at the source of the western Irrawaddy, and the Khasias of Assam. Eastward, however, these two races extend certainly through the provinces of Kuei-chou and Kuang-hsi, and it seems probable that all China south of the Yangtze was once inhabited by men speaking languages of these two types, now for the most part transformed into Chinamen.

The inference then is that both the Shan and the

Mon-Khmer speaking races have come from the east, pressed gradually out of the more eastern provinces of China by the slow advance of the Chinese, just as the Miao and Yao are at the present day being pressed into Tong-king and Indo-China by the same cause.

Professor Terrien de Lacouperie is of opinion that the Shan race was formed in China by contact of tribes from the north akin to the original Chinese with the Mon-Khmer inhabitants of China. However this may be, there seems no doubt from historical and other evidence that the Mon-Khmer speaking races arrived in Yün-nan and Indo-China long before the Shans.

Migrating gradually southwards the Mon-Khmer races have finally consolidated into large kingdoms in Tong-king, Annam, Cochin China, Cambodia, and Lower Burma. Those of this race who have not moved south have been driven into the hills by Shan, Chinese, and Tibeto-Burman conquerors, and we find among the hills of southern Yün-nan and of Indo-China a regular trail of tribes whose languages are akin to those of Annam and Lower Burma.

Beginning in the north with the Palaungs, the Las, Was, and La-was carry the trail down to the Talains of Lower Burma. Further east the Was and Tai-loi join on to the K'a-mus, Lameits, Stiengs, Banars and other Mon-Khmer tribes who extend down to Cochin China and Cambodia. While in the Tong-king direction, the P'u-mans, and K'a-mus form a connecting link between the Was and the Tongkingese.

(*e*) Relationship of language and relationship of race.

I have adopted as the only convenient method, the classification of the races of Yün-nan and western Ssŭ-ch'uan by their languages. The question then arises as to how much relationship of language also means relationship of race. This is a question which can probably never be fully answered. A systematic and comprehensive series of anthropological measurements of the different tribes might go far towards settling it. In the absence of evidence of this sort we can only judge by general physical resemblances and by such scraps of historical evidence as are available.

All the evidence of history and tradition seems to point to the speakers of Mon-Khmer languages being the earliest established of the present inhabitants of southern Yün-nan and of Indo-China. When then we find tribes speaking languages of this family, it is a fair inference that they are connected by race with each other and that they have not been mixed to any great extent with the Shan, the Tibeto-Burman, and the Chinese races who have come into the country after them.

It is not, however, probable that the Mon-Khmer speaking race found the country uninhabited when they came into it, and there are many traces of the presence of a smaller and darker race in Indo-China. With this race the intruding Mon-Khmer tribes have no doubt mixed. If it is correct to suppose that the Miao and Yao speak languages of the Mon-Khmer family it may perhaps be inferred that these tribes are the original type of the Mon-Khmer race, and that the Was, K'a-mus and other tribes have got their darker and broader faces, and their smaller stature from admixture with some other race whom they found in southern Yün-nan and Indo-China.

If in the course of their migrations the Mon-Khmer speaking peoples have absorbed other races, it is also probable that they themselves have in some places been absorbed by later conquerors. To take for instance the Lo-los. This race where found in their original home in the mountains of western Ssŭ-ch'uan are a very tall, comparatively fair race, often with straight features. This type is sometimes seen even in the south of Yün-nan, but on the whole there is certainly a tendency to develop a darker, smaller type of man in the more southern of the Lo-lo speaking tribes. This is specially the case among the tribes whom I have classed together as Wo-nis, and there are some of these who are extremely small men. It seems therefore probable that the Lo-los in their migration southwards have mixed with Mon-Khmer tribes and even perhaps with other shorter and darker races, and that this mixture has produced the Wo-nis and other Lo-lo speaking tribes of southern Yün-nan. In fact in some cases there may perhaps be little or no admixture of Lo-lo blood, and non-Lo-lo tribes may have had the Lo-lo language imposed on them by a conquering race.

It seems possible in the same way that the La-hus,

a race who speak a Lo-lo dialect, may be a mixture of Lo-lo with the neighbouring Wa race: while the Li-sos are possibly also a hybrid race of Lo-los, though the mixture in this case may perhaps be not with the Mon-Khmer race, but with some Tibeto-Burman tribe such as the Kachins or the Marus.

These ideas are only based on probability, and it is much to be wished that anthropological measurements should be taken of different tribes, so as to give credence to or to disprove these theories. The warmer climate of southern Yün-nan, compared to the bleak mountains of western Ssŭ-ch'uan, may no doubt account to some extent for an alteration in the physical appearance of the inhabitants, but it seems doubtful if climate alone could effect such a change. It is impossible to believe that the Independent Lo-los of Ssŭ-ch'uan—a race taller than the people of any European country—can be of the same blood as some of the tribes of the south of Yün-nan. Equally impossible is it to doubt that the *languages* of the Lo-los of the north and the Wo-nis of the south are very closely related to each other.

The theory that the southern branches of the Lo-lo speaking tribes are mixed with other races seems the most probable. At the same time another theory is possible. It may be that the more southerly type of Lo-lo is the real Lo-lo stock, and that the northern Lo-los and their neighbours the eastern Tibetans—also a tall, fair-skinned race—may have a large admixture of some Aryan or other foreign blood.

In the numerous migrations that have taken place in Asia, there seems nothing impossible in such a supposition. Some colour is given to this theory by the fact that of the Tibeto-Burman races only the eastern Tibetans and northern Lo-los have this very tall stature and comparatively fair or red complexion. The Burmese, the Chins, and the Kachins have all the more Mongolian features of the southern Lo-lo speaking races.

Perhaps it may be that both these theories are true. The northern Lo-los may have a mixture of Aryan blood, and the southern Lo-lo-speaking races a mixture of Mon-Khmer blood.

To come now to the Shan race. The Shans in Yün-

nan, as in the Shan States, live almost exclusively in the river valleys. Doubtless when they arrived in the country they now occupy, they found tribes of Mon-Khmer stock in possession. The majority of these were driven into the hills where they still live, but probably some were absorbed by the conquering Shans.

Also in modern times some of the Las, K'a-mus and other hill tribes have become Buddhists, and have to some extent taken to Shan customs and the Shan language. Intermarriages sometimes take place between the Shans and these Buddhist hill tribes.

On the whole, however, I think that the Shans have probably mixed less with other tribes than may have been the case with the Lo-los. Living as they do in the valleys, with an established Buddhist religion, a more or less settled government, and a comparatively high civilisation, the Shans are somewhat sharply distinguished from their neighbours. Probably then in most cases people who speak the Shan language have also a racial connection with each other.

With the Chinese the case is very different. The first connection of the Chinese with Yün-nan took place 2000 years ago, and no doubt Chinese influence has been more or less felt in that province ever since.

The migrations of Chinese into the province have sometimes taken the form of conquering armies, of military colonies, or of bands of immigrants sent by the Chinese Government from other parts of the empire. In other cases families or even individuals have come and settled among the non-Chinese tribes as traders or farmers. In all these cases the Chinese immigrants have doubtless intermarried with the original inhabitants, and a race of mixed blood, but of Chinese speech and customs, has thus grown up. After some generations this mixed race would always call themselves Chinamen, and would indignantly scout the idea of a descent from other tribes.

Besides this, as the influence and civilisation of the Chinese have spread, the neighbouring tribes have found it convenient to learn to speak the Chinese language, and to adopt to some extent Chinese customs. A time eventually comes when some of them begin to despise their own

language, customs, and dress, and to take a pride in adopting Chinese ways. When this idea once gets hold of them, the time is not far distant when they will call themselves Chinamen. A race of Chinese thus grows up who have really no Chinese blood in them.

This process can still be seen going on in western China. One comes across tribes in all states of transformation. The Tibetans and Independent Lo-los of western Ssŭ-ch'uan, the Li-sos of the upper Salween valley, the head-hunting Was, and many of the Miao still stick to their own customs entirely, the men still wearing their own dress, or *undress* as it might in some cases be more correctly called.

The great majority, however, of the *men* of the tribes of western China have so far come under the influence of the Chinese as to adopt their dress. With the *women* the case is different, and the women's dress usually forms the distinctive mark by which tribes can be told apart.

After the adoption of Chinese dress by the men, their next step is the learning of the Chinese language. After a few more generations perhaps even the women will learn to speak Chinese, and gradually their own language drops out of use. This stage once reached, it does not take long for the tribe to become thoroughly Chinese in their ways, and when the women take to Chinese dress and to binding their feet, the transformation is complete. In a generation or two they will consider themselves pure Chinamen, and will be much offended if anyone suggests the contrary.

I have watched this process going on with Lo-los, Shans, Las, and P'u-mans, and no doubt it has taken place with nearly every tribe of western China. The Chinese of this part of the empire must therefore be considered a very mixed race, and the use of the Chinese language can by no means be considered as proof of identity of race with other Chinamen.

This process of absorption of other races by the Chinese has undoubtedly been going on all over China ever since the Chinese entered the country. Whatever the pure Chinamen may have been five thousand years ago, it seems historically certain that the Chinaman of the present

day has grown up out of the gradual welding into one empire of Tartar tribes from the north, and of Mon-Khmer, Shan, and possibly to some extent Tibeto-Burman races who were originally in occupation of much of the country which has grown into China.

The great diversity of feature and of stature to be found among Chinamen from different parts of the empire is no doubt to be accounted for by original difference of race. At the present day everyone who speaks Chinese in his own house must be accepted as a Chinaman. The Chinese of Yün-nan are not therefore necessarily less pure Chinamen than their compatriots of other provinces, the difference being only that their absorption into the Chinese race has taken place at a later date than that of the inhabitants of most other parts of the empire.

(*f*) Description of the tribes of Yün-nan and western Ssŭ-ch'uan.

The following notes on the tribes of western China are necessarily very incomplete. My journeys were not made with the object of collecting ethnological information, so that I could only give to this subject my spare moments. I have not as a rule attempted to give much detail about the customs and beliefs of these tribes, as it is difficult to get information of this sort of sufficient accuracy to be of value. Unless one has ample time to get to know the people thoroughly, and has opportunities of checking what one is told by further enquiries in different places, one may often get hold of inaccurate and misleading ideas.

I have therefore confined my enquiries chiefly to gaining some knowledge of the character of the language of the tribe and of its present geographical distribution. I have also noted some details of their dress and appearance, and other peculiarities which are apparent on the outside. More intimate details as to their habits and customs I have left to future observers, who may have better opportunities and more leisure to give to this subject the attention it deserves.

I take the tribes in the order in which they are given on page 337.

Miao or Mhong.

The *Miao* or *Miao-tzŭ*, as they are called by the Chinese, give themselves the name of *Mhong*. The Shans, following the Chinese, call them *Meow* or *Hka*[1]*-meow*, and in some districts also speak of them as *Che-hpök, white Chinamen*, from their white clothes.

The real home of the Miao is in Kuei-chou province, and they probably also extend into Hu-nan. In fact many of the Chinese of these two provinces have doubtless much Miao blood in their veins.

In Yün-nan and western Ssŭ-ch'uan they are comparatively recent arrivals, and many of them only left their original homes in Kuei-chou three or four generations ago. They are certainly not numerous in either of these provinces, and there are very large tracts of country in which there are no Miao inhabitants, while in the districts where they exist, it is always in small communities that one finds them.

In Yün-nan they are to be found, I believe, only in the southern part of the province, and they have extended into Tong-king and also into the Shan State of Keng Tung (lat. 21° 15′, long. 99° 35′). The most westerly point that I have come across them is the neighbourhood of Taw-nio (lat. 23° 40′, long. 98° 45′). Through central and northern Yün-nan they do not seem to exist, but they reappear again to the north of this in western Ssŭ-ch'uan, where there are a few villages in the basin of the Ya-lung River (lat. 28° 15′, long. 101° 40′).

In dress the distinguishing mark of the Miao is the white kilt of their women. This garment reaches down to the knee and is pleated round the waist. I have also seen white jackets worn by both men and women, but dark blue jackets are perhaps commoner, and the men have adopted the short dark blue trousers of the Yün-nan Chinaman. Both sexes usually wear dark blue turbans, and the women often ornament their ears with large silver rings. The men carry crossbows, with which they shoot poisoned arrows[2].

[1] *Hka* means "slave" in Shan and is often contemptuously added on to the names of hill tribes.

[2] See Plate LIII, facing p. 232.

Miaos near the Burmese frontier

Photos by Major G. W. Johnson

Miaos near the Burmese frontier

Plate LXVI

The Miao are a race of medium height, with far more regular features than the Chinese. Many of their women would be considered handsome in any country in Europe. Their complexion is fair compared to most Chinese, and they often have red cheeks.

In Kuei-chou the Miao are said to have a great reputation as warriors, but in Yün-nan they are so scattered that they are always surrounded by more powerful neighbours and are not able to assert themselves. They are consequently somewhat shy and timid, and live usually in out-of-the-way places on the tops of the ranges. One very seldom comes across their villages anywhere near a frequented road.

I have found them an extremely pleasant people, quite ready to enter into conversation when they are satisfied that one is not a Chinese official.

Yao.

The headquarters of the Yao tribe is in the province of Kuang-hsi, and they probably also inhabit the neighbouring provinces of Kuei-chou, Hu-nan, and Kuang-tung. In Yün-nan they are, comparatively speaking, new-comers, and they are only to be found in the south-eastern and southern parts of that province. They have now spread in considerable numbers over the hilly parts of Tong-king, where they are known as *Man*, and a few are to be found in the Shan State of Keng Tung near the west bank of the Mekong. The Yaos seem to live entirely in the hills, but they are much more civilized and intelligent than some of their neighbours, and take a pride in being able to read a little Chinese.

I have not myself come across them in China, but have seen something of them in the state of Möng Hsing (lat. 21° 10′, long. 101° 10′) which now forms part of French Laos. Here they were of the tribe of Yaos called *Lan-ten*, and it was by this name that they were spoken of by the Shans.

In appearance they have a distinctly Chinese cast of countenance. The dress of the Lan-tens, both men and women, is dark blue. The women wear trousers and a long coat which has tails reaching down to the knee both in

front and behind, but is slit up on each side. Under this another short coat is worn. The men wear short coats and trousers and blue turbans put on in a round shape.

The Lan-tens work in iron to some extent, and are able to make their own rough guns and swords. The guns have short curved stocks like those of the Kachins. Their houses are made of wood, and the boards or split bamboos of which they are constructed are usually placed vertically.

Min-chia or Pe-tsö.

This tribe call themselves *Pe-tsö*, and are usually called *Min-chia* by the Chinese, but in the dialect of the T'êng-yüeh district they are often called *Min-ch'iang*.

In some parts of the upper Mekong valley they appear to be called *Lama-jên*. At least Prince Henri d'Orléans describes the Lama-jên as speaking a language closely connected with Min-chia, and mentions that they call themselves *Petsen*, which looks like a misprint for *Petseu*, or as I have transliterated it *Pe-tsö*. In another place Prince Henri describes the Lama-jên as a mixture of Min-chia and Chinese. Their language is at all events a dialect of Min-chia, and I think one is entitled to consider them as a tribe of that race[1].

The headquarters of the Min-chia race are the plain of Ta-li Fu (lat. 25° 40′, long. 100° 10′) and the country to the north of this nearly up to Li-chiang Fu. Eastward they are found in the Chao Chou plain, but not to the east of this, and southward they do not extend below the plain of Ta-li Fu. Westward the Mekong River may be taken as their boundary line. In the Yün-lung Chou district they are very numerous, and a few of them extend up the Mekong valley to the north of the latitude of Wei-hsi T'ing. They thus all live within a comparatively small area, and are not scattered all over western China like the Miaos and Lo-los.

I have myself only come across the Min-chia in the plains of Ta-li Fu and Chao Chou. Here they have come very much under Chinese influence, and have taken to

[1] See *Du Tonkin aux Indes*, French edition, pp. 161, 163, 357, 362.

Chinese dress, except that their women do not as a rule bind their feet. Most of them can speak Chinese, but they still keep up their own language and usually talk Chinese with a foreign accent. Some of them, however, have studied the Chinese classics and have even taken their degree in the official examinations.

The Min-chia are an enterprising people and travel far in search of work, even finding their way to Burma in the cold season. They are very good as coolies, and can carry very heavy weights on their backs.

The Wa, La, and Tai Loi Tribes.

The names *Wa*, *La*, and *Tai Loi* are really only the Shan names for tribes which are doubtless originally from one stock, but are now somewhat widely separated in customs and degree of civilisation. To the head-hunters and to other tribes which are still very uncivilised and are unpleasant neighbours they give the name of *Wa*. The civilised and friendly though non-Buddhist tribes they call *La*. And to those tribes who, though still living in the hills, have become Buddhists, they apply the name *Tai Loi*, i.e. *Hill Shans*.

It is not to be supposed that these tribes necessarily call themselves by these names, but those who have come in contact with the Shans will to some extent accept them, though in their own language they may have different names for themselves and may have a much more minute system of tribal sub-division. These Shan names, however, may serve as a useful means of distinguishing the different stages of civilisation of this race. But the definitions given above must not be taken as being absolutely rigid, for I have known quite civilised villages described as Wa, while the very rough inhabitants of Mêng-hung (lat. 24°, long. 99° 15′) are called Las.

In fact I have sometimes felt doubtful whether the distinction between La and Wa does not also depend to some extent on geographical position, for there is certainly a point, about lat. 23°, to the north of which they are called Las, and to the south of which, Was.

The real genuine wild Was occupy a very small piece

of country between lat. 22° and 23°, extending westwards to the Salween and eastwards not much beyond the watershed of the Salween and the Mekong, a range which here forms the Chinese frontier. The greater part of them therefore live within Burmese territory.

North of the Wa country, their kinsmen the Las form the bulk of the hill population of the Chinese Shan States of Kêng-ma and Chên-k'ang, extending up to about lat. 24°. A few stragglers are even found north of this in the Shweli valley.

Southwards the Wa race extends through Keng Tung, where many of them have become Buddhists, and are therefore called Tai Loi by the Shans.

Physically the Las and Was are short and broad, and are decidedly darker and uglier than the other races of Yün-nan or the Shan States. On the whole they are not so pleasant and friendly as most other tribes, and are apt to look on a stranger as an enemy.

The Was and Las build their houses of wood, and very often choose the top of a range or of a spur for the site of their villages. One characteristic of the race is to build very large villages, much larger than those of any other hill tribe. Villages of 100 houses are common, and I have come across at least one village of more than 400 houses. Among the head-hunters this is perhaps only a natural precaution, and the more civilised Las and Tai Loi have probably preserved this tradition of building large villages from the time that they themselves were as uncivilised as their neighbours.

I have not myself been through the country of the head-hunters, but an excellent description of this branch of the race will be found in the *Gazetteer of Upper Burma*, from the pen of Sir J. G. Scott[1].

The Las and Tai Loi I have come across chiefly in the Chinese Shan States of Kêng-ma and Chên-k'ang. Here the men dress in the universal dark blue of the Chinaman, but the women have a distinctive costume. They wear dark blue jackets ornamented with a little red, and with shell ornaments hanging down in front. Their skirts are

[1] *Gazetteer of Upper Burma*, Part I. Vol. I., pp. 493—519.

usually striped with red, blue, or yellow. Round their necks they wear very large plain silver rings.

The Tai Loi, who as stated above are distinguished from the Las by being Buddhists, have taken very much to Shan customs, and to some extent even talk the Shan language among themselves. If asked to what tribe they belong, they will usually say simply *Tai*, i.e. *Shans*, omitting the distinction of *Tai Loi*, i.e. *Hill Shans*, and will often deny the La origin, which is very plainly written on their features.

P'U-MAN.

P'u-man is the Chinese name for this tribe, and I think the Shans also call them so. In fact the word looks as if it might be of Shan origin. This name the P'u-mans will often accept as applied to themselves, but in at least one district I found they called themselves *Wa-la*. This latter name seems to support the evidence of their language that they are of the same stock as the Wa and La tribes.

The P'u-mans are only found in the south and south-eastern parts of Yün-nan, and as far as my experience goes they are much split up into small and scattered communities. This will probably account for the fact that they have in many places lost their own language and use the speech of their Chinese, Shan, or Wa neighbours. I was, however, lucky enough to find one district where they had a language of their own.

I have come across the P'u-man tribe about 30 miles N.E. of Yün Chou in the Mekong valley (about lat. 24° 45′, long. 100° 25′), but do not remember hearing of them anywhere north of this. The most westerly point at which I have seen them is near Kêng-ma (lat. 23° 30′, long. 99° 30′). East of this they are scattered over a good deal of the southern part of Yün-nan, and I have heard the natives of the Red River on the Tong-king border described as P'u-man, though they here speak a Shan dialect.

I am not aware that the P'u-mans have any distinctive dress. I have found them wearing much the same clothes as their neighbours, Chinese or Shan as the case may be.

Palaung.

Palaung is the Burmese name for this tribe, and as they have become well known by this name it seems best to stick to it. They call themselves *Ru-mai*. The Shans usually speak of them as *Kon-loi*, i.e. *hill-men*, but they occasionally call them *Palawng*. The Chinese name for them is *Pêng-lung*, or more nearly *Pōng-lōng*, according to the Yün-nanese pronunciation.

The headquarters of the race is the state of Taung-baing, or Tawn-peng, often called Ch'a-shan or Tea Hills by the Chinese. The capital of this state is about lat. 23°, long. 97° 10′, and here there is a Palaung chief who rules the state. From here they have spread over a great deal of the northern part of the Shan States, and have extended northwards into the Chinese Shan States. The very large majority of this people live in Burmese territory, and in China they are never found any great distance from the Burmese border. Northwards I do not think there are any Palaungs north of lat. 25°, and eastwards there are very few east of long. 99°.

The Palaungs are a quiet peaceable race, who have all adopted Buddhism and are in fact more fervent Buddhists than their Shan neighbours. They live in the hills, but in Nam-hkam and other places I have found their villages among the low grassy spurs just where the hills run down into the rice plain. Their houses are built of wood raised on piles, and are usually of a more or less oval shape.

The men have adopted the dress of the Shans, wearing according to their locality the dress of the northern or the southern Shans. The women wear a blue jacket and skirt, not unlike that of the Kachins, and where they live among Kachins they also wear bands of cane round the waist. The turban, however, is different from that of the Kachin women, and does not stick up so high. They almost invariably wear blue gaiters, and their general appearance is far more tidy than that of the Kachin women.

In degree of civilisation the Palaungs differ somewhat. Those who live in Taung-baing consider themselves superior to others who live elsewhere, and here their state of civilisation is scarcely inferior to that of the Shans. They

have no written character of their own, but many of them read and write Shan.

Further north, in some parts of the Kachin Hills, one often finds Kachins and Palaungs living together in the same village. Here the state of civilisation is not so high and approximates more to that of the Kachins, but the Palaungs even here do not seem to have adopted the somewhat quarrelsome and truculent character of their Kachin neighbours. They remain for the most part a quiet peaceable race.

Shan or Tai[1].

The name which the Shan race give to themselves is *Tai*, or *T'ai* as it is pronounced in Siam. This name seems very universal, and is used by nearly all the branches of the race. Our word *Shan* is the Burmese name for them, and variations of this name are applied to them by many other tribes: for instance, the Kachins, A-ch'angs, Zis, and La-shis, call them *Sam*, the Ma-ru name for them is *Sen*, the Palaung name *Tsem*, the Wa name *Shem*, and the Talains call them *Sem*. The origin of these names I have never heard explained.

The Shans of Yün-nan are called *Pai-yi* by the Chinese. *White barbarians* is Baber's explanation of the name, but this hardly seems probable. The character used by the Chinese for *pai* is not that which means *white*. If they did use the character for *white*, they would in Yün-nan pronounce it *peh*, not *pai*. Perhaps *pai* is merely a corruption of the Shan name *tai*.

The Shans are an extremely numerous and widely spread race. To the west they extend into Assam. In fact, in the 13th century A.D. they conquered that country, but have to a great extent become merged in the Hindoo population, though there are still some communities of them who speak the Shan language. In Kam-ti at the source of the western branch of the Irrawaddy is another isolated group of the Shan race, and there are also Shans on the upper course of the Chindwin River.

Coming further east, the plains of Burma, north of

[1] See also Plates III and XXIV, facing pp. 20 and 100.

about lat. 23°, are chiefly inhabited by men of Shan race, who in some districts are being gradually Burmanised and are taking to talking the Burmese language. Further east still are the Shan States, where the ruling population is Shan, and from here they have spread southwards into Siam, for the Siamese are merely a southern offshoot of the Shans, and the name *Siam* is probably a variation of the name given to them by the Burmese and other races.

Northwards the Shans do not in Yün-nan now spread very far, and there are no great number of them north of lat. 25°. Still they do exist north of this line, for they are to be found on the Yangtze and its tributaries in the part of that river which forms the boundary between Yün-nan and Ssŭ-ch'uan. I have also come across a few of this race further north than this, near Pê-tiao on the Ya-lung River, about lat. 28° 5′, long. 101° 30′.

In the east there can be no doubt that considerable numbers of Shans are to be found in the provinces of Kuei-chou, Kuang-hsi, and Kuang-tung. In fact in some parts of Kuang-hsi they probably form the greater part of the population. Exactly how far east the Shan race now extends is a question that there is not information enough to decide. It is probable that they at one time inhabited a great part of China south of the Yangtze, but many of them have now been absorbed by the Chinese. The physical resemblance between the Shan and the Cantonese Chinaman is remarkable, and it seems likely that the latter is chiefly Shan in blood, though now pretty thoroughly imbued with Chinese customs and ways of thought.

Whether the Shans ever extended over the provinces of China which lie north of the Yangtze is a question that can probably never be settled. Professor Terrien de Lacouperie is of opinion that the Shan race was formed in the mountains between Ssŭ-ch'uan and Shen-hsi out of a mixture of some northern tribe akin to the Chinese with a race of Mon-Khmer stock. This may be so, but M. de Lacouperie does not appear to give any reasons for this opinion.

To come back to Yün-nan, there can be no doubt that those Shans who have not been absorbed by the Chinese, have been gradually driven southwards since the conquest

Photo by Captain W. A. Watts-Jones

A Chinese Shan market (Mêng-sa)

Photo by Major H. R. Davies

Kam-ti Shans from the source of the Western Irrawaddy

of Yün-nan by the Mongol emperors of China in the 13th century A.D.

Ta-li Fu is known to have been the capital of the Shan empire which the Chinese call Nan-chao. The name *Ta-li* is probably of Shan origin, for the word in Shan could bear the meaning of *good ferry*, a very suitable name for a place situated at a ferry over the lake. *Mêng-hua* also has a distinctly Shan sound, and *Yung-ch'ang* is merely a corruption of *Wan-s'ang*, the name by which this place is still known to the Shans. The names of many other places have been altered out of recognition, for Möng K'öng has become Shun-ning; Möng Yü, Yün Chou; and Möng P'ö, P'u-êrh. These are all places which were once inhabited by Shans, but which now have become absolutely Chinese.

Probably the only reason why the Shans have been allowed to retain possession of any of the fertile valleys of Yün-nan is that the lower-lying places are feverish, and the Chinese find them too unhealthy to live in. The dividing line between Chinese and Shans comes at about 4000 feet. Above this height the valleys are healthy, and the Chinese have consequently settled there in sufficient numbers to absorb or drive out the Shans.

In some of these high-lying valleys the process is not yet complete. For instance, in Mien-ning T'ing (lat. 23° 50′, long. 100°), which is at a height of nearly 5000 feet, there are still many Shans living, the Shan women still retain their national dress, and there are still Shan Buddhist monasteries. But the Chinese, finding the place healthy, are now settling there in increasing numbers, and Chinese customs and language are making great headway. In 1895, when I visited the monastery there, I noticed that the Shan priest addressed the Shan boys in Chinese, and was himself a confirmed opium-smoker!

Again in places like Ssŭ-mao T'ing (lat. 22° 50′, long. 101°), at a height of 4,700 feet, and Mêng-ma (lat. 24° 10′, long. 100° 15′), at a height of 5,200 feet, though Chinese influence has now thoroughly asserted itself, there is still a small colony of Shans, destined no doubt to disappear in another generation or two.

Also in plains which are at a height of just about

4000 feet, such as Nan-tien (lat. 24° 50′, long. 98° 15′), there is often a mixture of Chinese and Shans.

Below 4000 feet the valleys are almost entirely given up to the latter race. Here one often finds a very civilised community of Shans occupying the valleys, while any Chinamen who may live in the district lead an uncivilised existence on the hill-tops.

Politically the Shans, where they are numerous enough to have a chief of their own, live in a state of semi-independence. The chief is always subordinate to the Chinese district official, but the latter very often does not interfere much in their affairs.

The Shans are a short, well made people, with very distinct Mongolian features, and a yellow complexion, as fair or sometimes fairer than the Chinese. The young people of both sexes often have red cheeks.

They are a pleasant, amiable people, very easy to get on with as long as one does not want to get any work out of them. For on the whole they are a lazy race, though one finds among them some very energetic people. The Chinese Shans are generally harder working than the inhabitants of the Shan States, probably owing to the example of and competition with the Chinese.

In the Shan States most of the trade is carried on by means of pack bullocks, and among the Chinese Shans these are sometimes used, though they also follow the Chinese custom of using mules and ponies. The Chinese Shans seem to be poorer than the Shan States Shans, and do not trade on the large scale of the latter. Probably the competition of the Chinese traders is too severe for them.

The Chinese Shans chiefly confine themselves to the growing of rice and other crops, but they also keep pigs, geese, ducks, and chickens in considerable quantities. Some of them are fairly good workmen as builders, carpenters, and blacksmiths.

Of the Shans of Yün-nan, the large majority belong to the division of that race which in the Shan States they call *Tai Che* (*Tai Hke*) or *Chinese Shans*. The Chinese Shans do not, however, generally use this name, but call themselves *Tai Nö* or *Northern Shans*, while they style the inhabitants of the Shan States not *Tai Long*, *Great*

Photo by Captain W. A. Watts-Jones

Shan village on the Nam Ting

Shans, as these latter would call themselves, but *Tai Taü*, *Southern Shans*.

A few Tai Taü do exist in Yün-nan close to the Burmese border in Mêng-ting (lat. 23° 30′, long. 99° 10′). And the Shan State of Mêng Lien or Möng Lem (lat. 22° 20′, long. 99° 35′) is inhabited by Tai Lem, another small division of the race.

The most important branch of Shans, however, next to the Tai Nö are the *Lü*, who form the bulk of the population in the state of Keng Hung (lat. 22°, long. 100° 50′) and the neighbouring parts of southern Yün-nan. They are called *Shui Pai-yi*, *Water Shans*, by the Chinese. In the extreme south-east of Yün-nan there are other branches of the Shan race, called *Lung-jên*, *Sha-jên*, and other names by the Chinese.

The history of the Shan race, and an account of the manners and customs of the Shans of the Shan States are given very fully in the *Upper Burma Gazetteer*, Part I. Vol. I. I shall therefore confine myself here to a few notes on the Shans of Yün-nan.

The dress of the Chinese Shan men consists always of the dark blue jacket and short trousers of the poorer Chinaman of Yün-nan. The women's dress, however, varies in different localities.

West of the Salween, the women are conspicuous by the size of their turbans, which appear to be nearly a foot high and get broader at the top. Jacket, skirt, and turban are all of the same dark blue colour.

East of the Salween, between that river and the Mekong, the women's turban is different. It is about the same size as that worn west of the river, but is put on in a different way, in a low oval shape, with the ends of the oval sticking out at each side.

Other differences are also noticeable between the Shans west of the Salween and those east of it. The dialect spoken in the west is very harsh and guttural, while that of the east approximates to the language of the southern Shans[1].

In the construction of their monasteries too they differ.

[1] See p. 347.

In the west the *kyawng*, as it is called, is built of wood in the ordinary Burmese fashion, and is raised on piles, the priests living in the same building that they pray in. East of the Salween, the main part of the monastery, or *wat* as it is here called, is a large and sometimes handsome one-storied building, usually of brick, which contains images of Buddha, and is used only for devotional purposes. No one sleeps inside it, but there is often a sort of verandah in front of the main door where travellers can sleep. The priests live in small houses round the courtyard in which the main building is situated.

This latter style of monastery is exactly what one finds in northern Siam, and leads to the inference that the Shans west of the Salween received their Buddhism from Burma, and those east of the Salween from Siam.

East of the Mekong the same type of monastery prevails, but the dialect again changes, and the women's dress is different. Here the turban though still dark blue is much smaller and is put on in a round shape. The jacket, sometimes dark blue and sometimes light blue, is folded back across the front like a waistcoat and is tucked inside the skirt, the latter being fastened round the waist with a strip of cloth which is often red. The colour of the skirt is sometimes dark blue, but is more often of a general greenish grey colour. Large silver rings are worn in the ears.

Further east still, among the Shans of the Red River another new dress is met with. Here the women wear red bands round their waists and red cuffs to their jackets. Both jacket and skirt are much ornamented round the edges with red, and sometimes with white and yellow. A very short jacket is often worn over the other jacket—also much ornamented.

The dress of the Lü or Shui Pai-yi differs considerably from that of the Chinese Shans. The men wear blue clothes, but the bottom of the legs of their trousers and the sleeves of their jackets are ornamented with stripes of some lighter colour, and on their heads they usually wear yellow silk turbans. The Lü women wear light blue or dark blue jackets, and skirts striped horizontally with various colours, generally green or light blue at the bottom.

Photo by Captain W. A. Watts-Jones

Northern Shan girl east of the Salween

Photo by Major H. R. Davies

Southern Shan from Theinni

Their turbans are dark blue with a gold fringe, and a silver ornament is often worn in the hair-knot.

Some description is also necessary of the dress of the southern Shans, for there are a few in Yün-nan. Here the men's dress is perhaps the most distinctive of the two. It consists of a very large turban put on crooked, generally white, and often surmounted by a big straw hat, a white jacket, and an enormously wide baggy pair of trousers, usually white or black. They bore their ears and stuff great pieces of folded paper into the hole, usually on one side only. The Chinese Shan men on the contrary, if they bore their ears at all, wear quite small earrings in both ears. The southern Shan women usually wear the white jacket and striped skirt of the Burmese.

The written character of the Chinese Shans appears to be the same everywhere, and does not differ widely from the alphabet used in the Shan States. The Chinese Shans, however, have two distinct forms of writing, one the alphabet used for all ordinary purposes, the other used exclusively for religious writings. The latter contains such letters as *d* and *g*, which do not occur in spoken Shan, and is really only a slightly modified form of the Burmese letters.

The Lü writing differs from that of the Chinese Shans and is very like that of the Laos of north Siam. It is fully described in the *Upper Burma Gazetteer*.

It is a mistake to suppose, as has sometimes been stated, that *all* Shans have a written character and are Buddhists[1] by religion. This would be true if the name *Shan* were only applied to the inhabitants of the Shan States, but it is certainly not true of the whole Tai race. The fact seems to be that only those Shans who have come to some extent under Burmese and Siamese influence have either the Buddhist religion or a system of writing.

In Yün-nan the Shans are Buddhist at Wei-yüan T'ing (lat. 23° 30′, long. 100° 45′), but east of this at Mo-sha on the Red River, they have no knowledge of Buddhism or of writing. I doubt whether in the south-east of Yün-nan or in any of the provinces further eastward, there are

[1] I allude to the Burmese and Siamese forms of Buddhism, not to the corrupted form of that religion practised by the Chinese.

any Shans who profess Burmese Buddhism or who have a written character.

To the north also among the scattered Shans of the Upper Yangtze there is no sign either of Buddhism or of books. The two things would naturally go together, for Buddhism of the Burmese or Siamese type could hardly be carried on without a knowledge of how to read the religious books.

Chinese[1].

Some remarks on the origin of the greater part of the Chinese of Yün-nan have already been made (pp. 367, 368). From this it will be clear that many of the Chinese are much mixed in race, and this fact, in Yün-nan as in other parts of the empire, no doubt accounts for peculiar local customs, which may exist. On the whole, however, the absorption of other races by the Chinese is a very thorough process, and the Chinese of Yün-nan conform to the customs of the rest of China.

Tibetan.

The Tibetans call themselves *Pê*, or, as the sound might be better transliterated, *Pö*. The most correct Chinese name for this race is *Ts'ang-jên*, for *Ts'ang* or *Hsi-ts'ang* is the Chinese for Tibet. In western China, however, the Tibetans are more usually known by other names. In Ssŭ-ch'uan they call them *Man-tzŭ*, or more politely *Man-chia*, names which are also applied to the Lo-los in that province. In Yün-nan the most common name for a Tibetan is *Ku-tsung*.

The Tibetans inhabit only the extreme north-west corner of Yün-nan, the districts in fact of Chung-tien and A-tun-tzŭ. In Ssŭ-ch'uan they extend as far east as the

[1] The Chinese of Yün-nan generally call themselves *Han-jên*: it was probably in the Han dynasty that they first entered Yün-nan. The Li-sos call them *Hö*, the Min-chias, Ma-rus, and some of the Lo-los call them *Ha*, while the Wa name for them is *Haw*: these are probably all corruptions of *Han*. The Shans call them *Ch'e*, written *K'e*, and probably the same word as the Chinese *K'ê*, a guest or stranger, which may have been applied to the first immigrants into this part of China.

Ya-lung River, and perhaps a little further. In both provinces there is also, besides the real Tibetan country, a considerable stretch inhabited by the semi-Tibetan Hsi-fan and Mo-so. It is in fact difficult to say in some cases what the difference is between a Hsi-fan and a Tibetan. I have gone on the principle of calling Tibetan any people who speak a dialect of the language of Lhasa, and call themselves Pê or Pö.

The eastern Tibetan is a man of great stature and physical strength, with a brick-red complexion and often very straight features, suggesting a mixture of some other blood than pure Mongolian[1].

They wear the long Tibetan coat tied in round the waist, so that the breast of the coat acts as a pocket for carrying about food, basins, pipe, snuff-box, and a variety of other miscellaneous articles. Hanging down in front the Tibetan usually has some metal charms to protect him against bullets and other ills. On his head he wears a soft felt hat or sometimes a turban, and on his legs long felt boots reaching to the knee and soled with leather.

The women's dress varies considerably in different places, but having failed to take any notes I cannot describe it from memory. Turquoise ornaments worn in the hair are a conspicuous feature. The method of doing the hair varies much in different places. In Chung-tien I have seen women with their hair plaited into several pig-tails: in other places they do their hair up. The Lhasa practice of smearing grease over their faces is by no means universal. I have seen women thus disfigured in Ba-t'ang, but they may have been Lhasa women.

The Tibetan houses are extremely well and solidly built. They are usually of two or three storeys, the lower storey being of stone and the upper storeys often of mud or solid beams of wood. In many cases the upper storey covers less space than the lower, so that part of the roof of the lower storey forms a sort of verandah or terrace for the room above it. The houses are usually surrounded by a courtyard enclosed by a high wall, with a solidly constructed wooden door in it.

Barley is the chief crop grown by the Tibetans, though

[1] For photographs see Plates LV and LIX, facing pp. 246 and 280.

wheat is also cultivated. Their food consists chiefly of *tsamba*, which is barley roasted and then ground into flour. The tsamba is mixed with water or with tea, and butter is often added to it. Buttered tea is in fact one of the necessaries of life to the Tibetan. Except for this he has few luxuries: rice is almost unknown in many places, and sugar very dear and difficult to procure.

The characteristic of the Tibetans which chiefly strikes the traveller is their extreme suspiciousness of strangers. This is perhaps natural in a sparsely populated country, with no very settled government. When they are once satisfied that the traveller is not a robber, they usually prove themselves a kindly and hospitable people.

The Tibetan form of Buddhism prevails everywhere and both the Old or Red Lama sect and the Reformed or Yellow Lama sect are to be found, the latter predominating. The Lamas are extremely powerful, and as they comprise about half the male population they practically rule the country.

The Lamas do not by any means confine themselves to their religious duties. Many of them work at trades, and some of them appear to only spend part of their time in the monasteries, becoming at other times an ordinary *Black Man*, as the layman is called, and even marrying.

One of the most remarkable characteristics of the Tibetans is that they appear to be able to resist the absorbing power of the Chinese. In fact so far from becoming Chinamen, they are apt to turn the Chinaman into a Tibetan. The half-bred Chinese and Tibetan usually grows up in the religion and language of his Tibetan mother.

In the government of the country too the Chinese do not seem to get the upper hand. In some districts, such as Chung-tien (lat. 27° 50′, long. 99° 45′), there is a regular Chinese official, of the rank of a *Chih-t'ing*, who has to be content to be an absolute nonentity in the district he is supposed to govern, the real rulers of the land being the Tibetan lamas.

Such a state of things has probably come about from two causes. First of all the Tibetans, having strong religious feelings and a very powerful priesthood, are thus bound together and can offer a much more united front to Chinese

innovations than the majority of other tribes who are not united by any such tie. Secondly, the very cold and unpleasant climate of Tibet has prevented the Chinese from coming into the country in large numbers or from bringing their women in, and they are thus never in a majority compared to the Tibetans. In the part of Tibet under Lhasa, Chinese women are not allowed by the Chinese government to enter.

Owing to a Tibetan rebellion at Ba-t'ang (lat. 30°, long. 99°) in 1904, in which some Chinese officials and four French missionaries were murdered, the Chinese Government seem to have awaked to the desirability of a firmer rule in that part of Tibet which is directly under Chinese officials. A high Chinese official has now been appointed to govern the Tibetan part of Ssŭ-ch'uan.

Hsi-Fan.

Hsi-fan is merely a Chinese name meaning *western barbarian.* It is applied by them to certain tribes which inhabit the borderland between China and Tibet, and may be accepted as a useful designation for these tribes.

Each of these tribes has its own name for itself, though it may turn out on further investigation that many of these names are merely clans of larger tribes. Much information on the Hsi-fan tribes is contained in Rockhill's *Land of the Lama* and in Baber's supplementary paper of the Royal Geographical Society. It cannot, however, be said that we have any very clear or comprehensive account of the tribal distinctions of the Hsi-fans.

Many of them, if not indistinguishable from Tibetans, are at all events completely Tibetan in religion and customs. In Mi-li (lat. 28° 10′, long. 100° 50′), for instance, though they do not speak the same language as the Tibetans of Chung-tien, they are in other respects thoroughly Tibetan and are ruled by a lama king. In other places, for instance, at No-po (lat. 28° 20′, long. 101° 40′), the Hsi-fans are not Buddhists at all but have a religion of their own, which includes, I was assured, the sacrifice of animals. It is, I think, only the most easterly of the Hsi-fans who have escaped conversion to Tibetan Buddhism.

For a thorough understanding of the Hsi-fans we shall have to wait till some competent Tibetan scholar makes a systematic study of the subject on the spot.

The Hsi-fans vary no doubt in race, but on the whole they are not so tall as the genuine Tibetan and are darker in complexion. Where not under Tibetan influence they are a pleasant hospitable people to travel among, but those who have become Buddhists are apt to have their full share of Tibetan suspiciousness.

Mo-so.

The Mo-so call themselves *Na-shi* or *La-shi*. *Mo-so* is the Chinese name for them and at Li-chiang Fu they appear also to be called *Li-chia*.

They were originally an independent race who ruled a considerable extent of country in north-western Yün-nan. Their ancient capital was at Li-chiang Fu (lat. 26° 50′, long. 100° 10′), and they still form a large part of the population of this district and of the country to the north of it. Westward they extend to Wei-hsi T'ing (lat. 27° 10′, long. 99° 15′), and from here there are Mo-so villages mixed with the Tibetans up the Mekong as far as Ya-k'a-lo.

The Mo-sos are, I believe, all Buddhists of the Tibetan type. I have seen very little of this tribe, except of those who live mixed up with the Tibetans on the upper Mekong. Here they have become thoroughly Tibetan in customs.

Lu-tzŭ.

The Lu-tzŭ inhabit the part of the Salween valley between about lat. 27° 30′ and 28° 30′.

Lu-tzŭ is the Chinese name for them, meaning simply *inhabitants of the Lu or Salween River*.

I have not seen this tribe and can give no account of them.

Information will be found in the writings of Desgodins and in Prince Henri d'Orléans' *Du Tonkin aux Indes*.

Mo-sos at Li-chiang Fu

Photos by Captain W. A. Watts-Jones

Mo-so women at Li-chiang Fu

Lo-lo.

The Lo-lo call themselves *Nei-su* or *Lei-su*[1] or *Ngo-su*. Their Chinese name is *Lo-lo* or more politely *Yi-chia*. But in Ssŭ-ch'uan they are more often called *Man-tzŭ* or *Man-chia*. The Shans call them *Myen*.

The real Lo-lo country is the Ta-liang Shan, a range of mountains which lies between the Chien-ch'ang valley and the Yangtze (about lat. 27° to 29°, long. 102° 30′ to 103° 30′). Here they still live under their own chiefs independent of Chinese rule.

From here they have spread very widely over the neighbouring part of western Ssŭ-ch'uan, and southwards throughout the province of Yün-nan. They are certainly the most universal and widely-spread tribe of western China. Westward they are found on the Burmese border about lat. 23° 40′ and even just within Burmese territory. Eastwards they extend to the very extreme borders of Yün-nan and even into Kuei-chou province (lat. 27° 20′, long. 105°). Northward in Ssŭ-ch'uan they reach nearly if not quite to the 30th parallel of latitude. Southwards they have spread into the Ssŭ-mao district well below lat. 23°. Over a very large part of Yün-nan they form the bulk of the hill population, and they are certainly the most numerous of all the non-Chinese tribes in that province.

The Lo-los of Ssŭ-ch'uan are a very fine tall race, with comparatively fair complexions, and often with straight features, suggesting a mixture of Mongolian with some more straight-featured race[2]. Their appearance marks them as closely connected by race with the eastern Tibetans, the latter being if anything rather the bigger men of the two.

Further south in Yün-nan the pure Lo-lo type has perhaps somewhat deteriorated, but even here one often finds tall and fairly straight-featured people, and they are always a finer race physically than the Li-sos, La-hus, Wo-nis and other Lo-lo-speaking tribes.

The characteristic feature of the dress of the northern Lo-los is the felt cloak, which both men and women wear as

[1] In one place where Lo-los and Li-sos lived close together I found the Lo-los drew a sharp distinction between the Lei-su (themselves) and the Li-su (Li-sos).

[2] See also Plates XLIX and LIII, facing pp. 212 and 232.

a protection against the rain and the cold[1]. This is of a grey colour, is fastened round the neck and reaches below the knees.

Those Lo-los who live in the Ta-liang Shan are still ruled by their own chiefs and are independent of the Chinese Government. Among the Chinese they have a bad reputation as robbers and slave-raiders, and there can be no doubt that they do make frequent raids on their Chinese neighbours and that they sometimes carry off some of them as slaves. They are also said to be much given to drunkenness, and this is corroborated by the French missionaries of this part of Ssŭ-ch'uan.

I have not been through any of the independent Lo-lo country, but from what I have seen of the same race of Lo-los on the outskirts of this country they are a very pleasant, hospitable race, and very easy to get on with. This description indeed applies to all the Lo-los I have met with both in Ssŭ-ch'uan and Yün-nan: it is always a pleasure to travel through country inhabited by this race and to put up in their villages.

A French traveller, M. Bonin, has been through some of the independent country and does not seem to have had any difficulty. Doubtless there are rough customers among the Lo-los who would think their natural enemy, the China-man, quite fair game to murder, enslave, or rob, but the European traveller whom they have no reason to dislike could, with proper arrangements with the chiefs, pass through their country with safety.

Of the Lo-los of Yün-nan there can be no doubt that many are being gradually absorbed by the Chinese. I have come across villages in all stages of this process. Some have gone so far as to talk Chinese among themselves and to deny their Lo-lo origin. Still there are large numbers of this race who still retain their language and customs.

One of the largest of these tribes are the people whom the Chinese call *Mêng-hua Lo-lo* or *Mêng-hua Jên.* As their name indicates, they inhabit the district of Mêng-hua T'ing (lat. 25° 15′, long. 100° 20′); and they form almost the entire population of the hills of these parts. Southwards

[1] Much information about the Ssŭ-ch'uan Lo-los is given by Baber in the supplementary papers of the Royal Geographical Society.

this branch of the race extend to the Yang-pi River, and a few scattered villages of them are found much further south.

The men here dress in Chinese fashion. The women wear blue trousers with a blue skirt over them, both reaching to the knee: the jacket is of the same colour and has no sleeves. Chinese influence is gradually extending here: the men can all speak Chinese and some can read and write it. In a few more generations the Lo-lo language will very likely die out here.

These Mêng-hua Lo-los are a very prosperous race. The hillsides are covered with cultivation, and they own large herds of ponies, mules, buffaloes, cattle, and goats.

Li-so.

The name by which these people call themselves is *Li-su*. This the Chinese have corrupted into *Li-so*. The Shan name is *Li-hsaw* which is merely another way of transliterating *Li-so*: the Shans also sometimes call them *Che-li*. The Kachin name for them is *Yaw-yen*..

The headquarters of the Li-so race is the basin of the Salween from about lat. 25° 30′ to 27° 30′. Eastwards they spread as far as the right bank of the Mekong and westwards into the basin of the Nmai Hka, the eastern branch of the Irrawaddy. They are also found in fairly large numbers down the China-Burma frontier to below the 25th parallel of latitude. It seems probable that the upper part of the valley of the Shwe-li or Lung Chiang north of T'êng-yüeh (lat. 25°, long. 98° 30′) was once inhabited by Li-sos who have now become Chinamen.

The Li-sos seem to be an enterprising race in the way of emigration, for many of them have wandered very far from their original home. They are to be found living in small and scattered communities throughout the part of the Kachin Hills which lies east of the Irrawaddy and throughout the Northern Shan States. They even extend into the Southern Shan State of Keng-tung; and near Möng Long (lat. 20° 55′, long. 101° 45′) in French Laos I have heard of a tribe called Che-di whom I believe to be Li-sos: for one Shan name for them is Che-li, and the *l* of the Shans often turns into *d* among the Laos.

Over the greater part of central and eastern Yün-nan there are no Li-sos, for they are for the most part inhabitants of the western part of the province. A few of them have, however, wandered eastward and I have heard of them among the hills south of San-ying-p'an (lat. 26°, long. 102° 30′). Other travellers have reported their existence near Yung-pei T'ing (lat. 26° 45′, long. 100° 45′).

The real Li-sos in their natural, primitive state are to be found in the valley of the Salween north of lat. 26° 30′. The late Mr Litton of the Chinese Consular Service has travelled through this part of the Salween valley and found them quite uninfluenced by Chinese civilisation and living in a very primitive state of savagery. They do not, however, seem to have resented the intrusion of a European, and Mr Litton had no difficulties with them.

South of about lat. 26° 30′ the Li-sos have come more under Chinese influence, and it is noticeable even in the Shan States that the Li-sos are very Chinese in their customs, smoke opium, and keep the Chinese New Year. The men, too, even in places remote from the Chinese frontier, can still usually speak Chinese, and the Li-sos and the hill Chinamen intermarry.

Both in the Kachin Hills and in the Shan States the Li-sos live in very out-of-the-way places right on the tops of the ranges, among the dwarf bamboos and the very sources of the hill-streams—ideal spots for a quiet life, where scarcely even a wandering Kachin ever intrudes. Being weak in numbers they probably occupy these sites from necessity, not from choice, having to take what is left by their more powerful neighbours.

Here they are a quiet, pleasant people whom like the Miao one seldom comes across, as they live in such remote places.

La-hu.

La-hu is the name by which this tribe call themselves. The Chinese name for them is *Lo-hei*. The Shans call them *Mu-hsö* or *Myen Mu-hsö*. The word *Mu-hsö* in Shan means *hunter*.

The language that these people talk is simply a dialect

of Lo-lo, but the La-hus are a smaller race than the genuine Lo-los. As they live in the same part of the country as the Was and Las, it seems quite probable that they may be a half-bred race of Lo-lo and Wa.

The greater part of the La-hus live between lat. 22° 30′ and 23° 30′ in a region bounded on the west by the Salween and on the east by the Mekong. A few scattered villages extend to the north of this and there are a few La-hus east of the Mekong, but the greatest extensions have taken place southwards where some of this race have settled in the state of Keng Tung and even in northern Siam, in the neighbourhood of Möng Fang, about lat. 20°.

In China the men have taken to Chinese dress. The women still retain their tribal costume. This is a long coat reaching nearly down to the knees, trousers down to just below the knees, and gaiters, the whole very dark blue or black. The turban is also of the same colour, and is put on so as to leave a long piece hanging down behind.

The La-hus are a warlike race and have given the Chinese much trouble in conquering them. Some of them have firearms, but the national weapon is the cross-bow which is used with poisoned arrows. The cross-bows are very strong and well made: they cannot be strung without placing both feet on the bow and even then it is a considerable exertion. The arrows are made throughout of hard wood: instead of feathers little bits of leaf are used, and in the poisoned arrows these are coloured brown to distinguish them. In northern Siam where there is a good deal of big game, the La-hus shoot even bison and tigers with their cross-bows: an animal hit anywhere by a poisoned arrow dies within an hour or two.

Wo-ni.

Wo-ni is a general name given by the Chinese to a large number of tribes who live in southern Yün-nan and speak dialects of the Lo-lo language. It is a convenient term by which to denote those races who, while Lo-lo in language, are inferior to that race in physique and appearance. Among the tribes of this race whom I have come across are the K'a-tu, Pu-tu, Pi-o, Ma-hei, Lo-pi, and A-k'a.

There are also K'u-tsung (not to be confused with Ku-tsung, Tibetan), San-su, P'u-la, and others.

The Wo-nis do not extend north of the 24th parallel of latitude and the real home of the tribe seems to be the district of T'a-lang T'ing (lat. 23° 25′, long. 101° 45′). Here they form the bulk of the population. They have migrated southwards in considerable numbers, and the A-k'as, the most southerly branch of the race, form a large part of the population of the hills of Keng Tung.

The three tribes who inhabit T'a-lang T'ing are the Pu-tu, the Pi-o, and the K'a-tu, or K'a-to as it is pronounced in some places. These three tribes speak dialects which are mutually intelligible to the others. The outward sign of the tribe lies as usual in the women's dress. The Pu-tu and Pi-o women wear a coat reaching nearly to the knees and open in front, with a separate piece of cloth fastened across the breasts. With the Pu-tus this piece of cloth is buttoned on to the coat: with the Pi-os it is a separate piece fastened on underneath the coat. The skirt of both is open in front like the Burmese tamein. The turban has a long piece of spare cloth which is thrown back over the head and hangs down behind. The young unmarried girls, however, wear blue caps and cut their hair to a length of about a foot so that it hangs down over their necks. The coats and skirts of the Pu-tu women are always dark blue: those of the Pi-os are often white. As ornaments large silver earrings are worn.

The K'a-tu women differ from the Pu-tu and Pi-o in wearing trousers instead of skirts and in having a lot of little metal ornaments hanging down from the front of their turbans[1].

The Ma-hei, who call themselves *Pa-hawng*, also live in the T'a-lang district, and I have come across them also near Ssŭ-mao and P'u-êrh. The Ma-hei women's dress is black. They wear short jackets down to the waist, short trousers down to the knee, and, if married, a piece of cloth tied round the waist so as to hang down over the trousers. They wear nothing on their heads, and the hair is plaited into a pig-tail. They have silver ornaments hanging down from their necks in front of the jacket.

[1] See Plate XLVII, facing p. 204.

The *A-k'as*, or *Kaws* as they are also called, are very numerous in the eastern part of Keng Tung and the adjoining parts of French Laos and southern Yün-nan.

The women wear a very short coat not reaching nearly down to the waist, and an equally short skirt which does not reach down to the knees. The head-dress is very peculiar, consisting of two bands of bamboo, one round the head and the other standing up at the back of the head; these two bands are hardly seen, as the whole is covered with dark blue cotton stuff ornamented with bits of silver.

A peculiarity of this tribe is that they eat dogs—not a common practice among the tribes of western China.

A-CH'ANG.

This tribe call themselves *A-ch'ang*, and the Chinese call them *A-ch'ang* or *Nga-ch'ang*. The Shans often call them *Tai Möng Hsa* or *Tai Hsa*, meaning *Shans of Möng Hsa*, which is the name of the country they live in. The Burmese adopting this name call them *Maing-tha Shan*, *Maing-tha* being merely the Burmese corruption of Möng Hsa.

The geographical distribution of the A-ch'angs presents no difficulties, for the whole race lives in one valley 14 miles long and two miles wide, situated about lat. 24° 25′, long. 97° 50′. This is divided into two small states called Ho-hsa (Hu-sa) and La-hsa (La-sa), each ruled by a chief, the whole being usually called Möng Hsa by the Shans.

To such an extent have the A-ch'angs adopted the dress, customs, and Buddhism of the Shans, that they will even sometimes speak of themselves as Shans, though on closer questioning they will admit that they really belong to a distinct race. In feature they differ considerably from the Shans[1], and their language is totally distinct from Shan and very closely connected with the Zi, La-shi, and Ma-ru languages. There are many of the Zi tribe living not far off in the hills, and it seems probable that the A-ch'angs may really be Zis who have settled in a valley and taken to more civilised ways. That they are not Shans seems certain. The chiefs of both Ho-hsa and La-hsa were agreed on this point.

[1] See Plate IV, facing p. 26.

As Möng Hsa is 4,500 feet above the sea the Chinese have found it healthy enough to settle in and there are considerable numbers of them living there: many of them have intermarried with the A-ch'angs. There is a very large population for the size of the valley and every inch of the plain is cultivated, the villages being built round the foot of the hills so as not to take up ground that might be given to rice cultivation. The land, however, does not suffice for the population, and large numbers of the men go away for some months every winter to the Shan States and to Burma in search of work. They have a great reputation as builders, blacksmiths, and carpenters.

Ma-ru.

The Ma-rus call themselves *Lawng*. The Zis and Lashis call them *La-lang* and *Lang* respectively. The Kachins call them *Ma-ru*, a name which the Shans pronounce *Ma-lu*.

The real Ma-ru country is to be found on the Nmai Hka or eastern branch of the Irrawaddy, extending from near its junction with the western branch up to at least lat. 27° and perhaps higher. South of this there are scattered villages of them through the eastern part of the Kachin Hills, and they reappear again in considerable numbers in the Northern Shan State of Hsen-wi, between lat. 23° and 24°. They only extend over the border into China in very small numbers.

This geographical distribution of the Ma-rus makes it probable that the Kachins came down the western branch of the Irrawaddy in their migration southward and thus left undisturbed the Ma-rus, who were still living on the eastern branch. Those Ma-rus, however, who had already migrated south before the arrival of the Kachins, were probably driven further south by the incursion of the latter and took refuge in the Northern Shan States, a country into which the Kachins have only intruded in the last generation or two.

On the genuine unadulterated Ma-ru, Captain Pottinger, who has travelled in their country, is the chief authority.

Photo by Major H. R. Davies

Kachin women

Some of his remarks are quoted in the *Upper Burma Gazetteer* to which I would refer the reader.

In the Kachin Hills the Ma-rus are generally found living in out-of-the-way places. They have taken very largely to the dress and customs of the Kachins, and in many cases are hardly distinguishable from them. The Kachins, however, look down on them because they eat dogs.

La-shi.

This tribe call themselves *Le-chi*. The Kachins call them *La-shi*.

The largest community of them is to be found in a stretch of country about lat. 25°·50′, long. 98° 20′. From here southward, villages of this tribe are to be found down the Burma-China frontier, and they extend into the Northern Shan States.

The La-shis are by tradition said to be the descendants of a Chinaman and a Ma-ru woman. Their language is almost the same as those of the Ma-rus and Zis, and no doubt these three tribes are intimately connected by race.

The La-shis, like the Ma-rus, have taken very much to Kachin customs and dress.

Zi or A-si.

The Zi call themselves *Tsai-wa*. They are called *A-tsi* by the Kachins, and *Zi* or *A-si* by the Burmese.

Scattered communities of them extend down the Burma-China frontier from about lat. 25° 30′ to lat. 24° and perhaps below this.

They often live in the close neighbourhood of the La-shis and the languages of these two tribes are nearly the same. The Zis, however, now belong to the Lepai, one of the regular tribes of the Kachins. I have, however, heard from Kachins that it is really only the chiefs who are Lepais. It therefore seems probable that the Zis may have been originally Ma-rus or La-shis who have been conquered by Lepai Kachins.

The Zis retain their own language, but otherwise seem to be undistinguishable from the Kachins.

Kachin[1].

The Kachins call themselves *Ching-p'aw*. The Burmese call them *Kachin*, the Shan name for them is *Hkang*. The Ma-rus call them *P'ow*, and the La-shis call them *P'ok*. The Chinese usually speak of them as *Yeh-jên*, i.e. *savages*, but if they want to be polite they call them *Shan-t'ou*, i.e. *hill-tops*.

The Kachins form the bulk of the population in the extreme north of Burma. To the west they extend to Assam, and to the south into the Shan States as far even as lat. 20° 30′. By far the largest proportion of them live in Burmese territory, but they also extend into western Yün-nan, though nowhere are they found further east than long. 99°.

They are a somewhat uncivilised and quarrelsome race, not always given to respecting the rights of their neighbours. A large amount of information about the Kachins will be found in the *Upper Burma Gazetteer*, and I can add nothing to what is given there.

[1] See also Plate VIII, facing p. 40.

APPENDIX IX

NOTE ON THE MAP.

THE map of Yün-nan which accompanies this book is, I venture to think, the best general map of that province which has hitherto been produced. I would, however, hasten to add that it is very far indeed from being a complete or accurate survey. Its want of completeness will be at once apparent from the repeated occurrence of white spaces with the word "unsurveyed." written across them. As to its measure of accuracy, a description of the methods adopted will give an idea of how much dependence is to be placed on it.

The only part of the map which really merits the title of being a survey is that which has been triangulated and regularly surveyed by the Survey of India. This includes the part within Burmese territory up to, and in some cases rather beyond, the Chinese frontier.

Within Chinese territory the map is chiefly based on the work of British officers, sometimes working alone and sometimes accompanied by native surveyors of the Survey of India or Indian Intelligence.

In these journeys it was found impossible to carry on a triangulation in the limited time available. The survey was therefore done by a plane-table traverse, the end being kept in view of getting in as much country as possible rather than of making a minutely accurate survey of the actual road and its immediate surroundings. The scale used was 4 miles to 1 inch. Distances were in most cases measured with a cyclometer wheel.

The errors inseparable from working without triangulation points were kept in check by astronomical observations.

Latitudes were constantly taken with sextant or theodolite, and the errors of latitude on the map are not likely to be great.

In *longitude* there is more room for error, but telegraphic longitudes were taken at T'êng-yüeh T'ing, Yung-ch'ang Fu, Ta-li Fu, Ch'u-hsiung Fu, Yün-nan Fu and P'u-êrh Fu. These are dependent on the Survey of India position of Bhamo. In the north-eastern part of the map, too, a chronometer longitude of Sui Fu was obtained from the navy.

Heights depend entirely on aneroid and boiling-point thermometer observations. As there was no station in the province to which these observations could be referred, they have been left uncorrected. Heights must therefore be considered as approximate only.

Besides the work of the Survey of India and of British officers, use has been made of all available material from other sources. This material varies very much in value. Some of it is evidently careful and accurate work, while in other cases it is the merest sketch on a very small scale.

The compilation of the map was all plain sailing as long as it consisted only in the reduction of the 4 miles to 1 inch sheets of the Survey of India. Difficulties began when other bits of survey published by different travellers had to be fitted in. These often did not agree with each other, and though great pains have been taken in the fitting, there must inevitably be some errors and distortions. The error of 2′ 27″ of longitude to which attention is called on all the Survey of India sheets has been corrected in this map, so longitudes will be found to differ from those of the Survey of India by this amount. In making the reduction, care has been taken in the selection of the places to be marked, that those should be included which are important owing either to their size or to their forming convenient stages in a road.

The Chinese names have been transliterated according to Wade's system. In some cases where travellers have spelt their names on no recognised system, the correct transliteration has been impossible and guesses have had to be made. It is hoped that all important places are correctly spelled, but there will certainly be mistakes in some of the village names. Only in one case has a deviation been knowingly made from Wade's system: this is in the Yün-nan word for *market*, which though pronounced *chieh* in

Peking, becomes *kai* in western China, and has been so transliterated in this map. Other concessions to western pronunciation, such as *chio* instead of *chiao* for *foot*, and *ai* instead of *yai* for *precipice*, are sanctioned by Giles' dictionary.

On the *tribal names* (shown in red on the map) much care has been bestowed, and a large number of reports and books have been gone through to try and make them accurate. It is, however, impossible on a small scale map to show in detail the distribution of the tribes. There are often two or three different races living so mixed up together that nothing less than a map of sufficient scale to show every village would answer the purpose. This map must therefore only be considered as giving a general idea of the geographical distribution of the tribes. It is, moreover, very incomplete in this respect, as there are large tracts of country about the inhabitants of which there is no information. Only names of non-Chinese tribes have been inserted. The Chinese are found in greater or smaller numbers over nearly the whole of the part of the map which lies within Chinese territory and even over some of that across the frontier.

The scale of 20 miles to 1 inch was chosen as the largest on which it was possible to get the whole province into one sheet. A scale of $\frac{1}{1000000}$ would have made the map too large for this.

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APPENDIX X

ITINERARY.

First Journey.

Date	Place	Miles	Height in feet
	From **Nam-hkam**		3500
8 January, **1894** ...	Möng-ping	7	3500
9 „ „ ...	Mêng-mao	13	3500
10 „ „ ...	Halt		
11 „ „ ...	Chang-fêng-kai	16	3100
12 „ „ ...	Kying-hkan...	7½	3100
13 „ „ ...	Lung-ch'uan (Möng Wan) ...	9	3100
14 „ „ ...	Hu-sa (Ho-hsa)	10½	4500
15 „ „ ...	La-hsa	7	4500
16 „ „ ...	**Man-yün** (Man-waing)	10	2750
17 to 21 „ ...	Halt		
22 „ „ ...	Sa-re...	10	5250
23 „ „ ...	Shih-t'i	6	3900
24 „ „ ...	Nam-paung...	6	1200
25 „ „ ...	Myo-thit	14	400
26 „ „ ...	**Bhamo** (by boat)	23?	350

Second Journey.

1894	From **Myitkyina**		500
26 to 29 December...	Sa-don	42	4664
30 Dec. to 3 Jan. 1895	Halt		
4 January, **1895** ...	Ch'ieh-ma-ho	8	4700
5 „ „ ...	San-si gorge	10	8900
6 „ „ ...	Mêng-ka	10	5400
7 to 10 „ ...	Halt		
11 „ „ ...	Chan-hsi (San-si)	17	3300
12 „ „ ...	Hsiao-ti-fang	9	6200
13 „ „ ...	Mien-ch'in	15	4500
14 „ „ ...	**T'êng-yüeh-T'ing**	8	5365
15 & 16 „ ...	Halt		
17 „ „ ...	Kan-lan-chai	13	4800
18 „ „ ...	T'ai-p'ing-p'u	7	7400
19 „ „ ...	Lu-chiang-pa	11	2400
20 „ „ ...	P'u-p'iao	15	4500
21 „ „ ...	**Yung-ch'ang Fu**	15	5500
22 & 23 „ ...	Halt		

Date	Place	Miles	Height in feet
24 January, 1895 ...	Ta-li-shao	13	7200
25 „ „ ...	Sha-yang	10	4800
26 „ „ ...	**Ch'ü-tung**	13	5250
27 „ „ ...	Sha-sung-shao	10	7350
28 „ „ ...	Huang-lien-p'u	10	5200
29 „ „ ...	T'ai-p'ing-p'u	10	7400
30 „ „ ...	Yang-pi	10	5150
31 „ „ ...	Ho-chiang-p'u	12	5050
1 February „ ...	**Hsia-kuan**	10	6700
2 „ „ ...	**Ta-li Fu**	8	6700
3 & 4 „ ...	Halt		
5 „ „ ...	Back to Hsia-kuan...	8	6700
6 „ „ ...	Hsün-chien	12	6250
7 „ „ ...	Wu-li-hei	13½	6850
8 „ „ ...	Ho-ti...	11	
9 „ „ ...	Hsi-hsin-chên	10½	7200
10 „ „ ...	Hsin-niu-kai	10	3900
11 „ „ ...	A-lu-shih	9½	6400
12 „ „ ...	Sung-lin-t'an	9	5250
13 „ „ ...	Hsin-ts'un	10	5850
14 „ „ ...	**Shun-ning Fu**	12½	5800
15 „ „ ...	Halt		
16 „ „ ...	Lo-t'ang	12	5000
17 „ „ ...	**Yün Chou**	11½	3800
18 „ „ ...	T'ou-tao-shui	14½	5100
19 „ „ ...	Yi-wan-shui	9½	5350
20 „ „ ...	La-tien-p'o	11½	
21 „ „ ...	Ta-niu-ch'êng	14	
22 „ „ ...	**Mien-ning T'ing**	5½	4980
23 „ „ ...	Halt		
24 „ „ ...	Ping-yüan-hsün	15	6500
25 „ „ ...	Wan-nien-chuang	10	3500
26 „ „ ...	Mêng-yung (Möng Yawng) ...	7½	3750
27 „ „ ...	Man-hkü	8½	3000
28 „ „ ...	Mêng-sa (Möng Hsa)	13	4550
1 March „ ...	Hsiao-p'u-tzŭ	11	6800
2 „ „ ...	Mêng-chien	15	1850
3 „ „ ...	Sum-nö	13	1800
4 „ „ ...	**Mêng-ting**	8	1800
5 „ „ ...	Hwe-hpyen	8	1800
6 „ „ ...	Nam-hu	16½	1800
7 to 11 „ ...	Halt		
12 & 13 „ ...	Back to **Mêng-ting**	24½	1800
14 „ „ ...	Man-hsak	8½	3850
15 „ „ ...	Pang-maw	8	4300
16 „ „ ...	Hsi-nga	13½	4600
17 „ „ ...	Man-hpa	11½	4300
18 „ „ ...	Wan-kang (near Mêng-sung) ...	16½	3250
19 „ „ ...	Camp on Nam Tong-mi	12	5600
20 „ „ ...	Nawng-hpaw	10½	5850
21 „ „ ...	Hsia-mêng-yin	14½	3200
22 „ „ ...	Halt		
23 „ „ ...	Shang-mêng-yin	6	3350
24 „ „ ...	Camp on top of range	11¼	6450

Date	Place	Miles	Height in feet
25 March, 1895	La-pa	13	5800
26 „ „	**Ch'üan-lo**	9½	4350
27 „ „	Nan-pei ferry	11½	2300
28 „ „	Mêng-lêng	15	3800
29 „ „	Mêng-chu	6	4850
30 „ „	P'ing-chang	14	4600
31 „ „	Chou-shui	13	3500
1 April „	Hsiao-hei-ch'in	13	3500
2 „ „	Na-ku	7½	4850
3 „ „	**Ssŭ-mao T'ing**	8¼	4700
4 „ „	Halt		
5 „ „	Na-k'o-li	12	4600
6 „ „	**P'u-êrh Fu**	12½	4500
7 „ „	Halt		
8 „ „	Hsi-sa	13	2650
9 „ „	Man-ku	11	3650
10 „ „	Camp on Ch'ing-shui Ho	13½	4200
11 „ „	Lung-t'ang	8	5500
12 „ „	**Wei-yüan T'ing**	8	3150
13 „ „	Po-ling-t'an	16	5800
14 „ „	Mêng-ka	16	3750
15 „ „	Halt		
16 „ „	Ko-t'i-t'ang	13	5650
17 „ „	Ta-pêng	8	2800
18 „ „	Man-nung	14	6150
19 „ „	P'o-chio-chai	10	4800
20 „ „	Mêng-mêng	7½	3850
21 „ „	Ya-sai	8¼	6900
22 „ „	Pang-long	12	5000
23 „ „	**Kêng-ma**	14	3850
24 „ „	Halt		
25 „ „	Man-sawk	17	1900
26 „ „	Hsai-hkau	8	5700
27 „ „	Lung-cha	13	5450
28 „ „	Ma-li-p'ing	9	6950
29 „ „	K'a-fang	13	5400
30 „ „	Mêng-pun	7	4150
1 May „	Lu-yin-t'ang	13½	5000
2 „ „	Han-kuai	6	3900
3 „ „	P'in-ka	15	5600
4 „ „	Camp near Ch'ên-chia-chai ...	11	7000
5 „ „	Hsiang-ta	10	5700
6 „ „	**Mang-shih** (Möng Hkwan) ...	10½	3350
7 „ „	Na-hka	13	3950
8 „ „	Ho-t'ou-ts'un	4	6400
9 „ „	Ho-yang	12	3300
10 „ „	Ung-lŏn	16	3650
11 „ „	Ning-kram	12	5100
12 „ „	Se-kao (near Hu-sa)	10½	4500
13 „ „	**Man-yün** (Man-waing)	18	2750
14 „ „	Sa-re	10	
15 „ „	Nam-paung	12	1200
16 „ „	Myo-thit	14	400
17 „ „	**Bhamo**	18	350

THIRD JOURNEY.

Date	Place	Miles	Height in feet
	From **Bhamo**		350
17 November, 1898...	Myothit	19¼	400
18 „ „ ...	Nampaung	12	1200
19 „ „ ...	Yang-jên-ch'ang	7	4900
20 „ „ ...	**Man-yün** (Man-waing)	13½	2750
21 „ „ ...	T'ai-p'ing-kai	11	2700
22 „ „ ...	Chan-ta (San-ta)	6½	2900
23 „ „ ...	Kan-ai (Chiu-ch'êng)	13	2850
24 „ „ ...	Tiao-kang	10¼	3500
25 „ „ ...	Nang-sung-kuan	13	3600
26 „ „ ...	**T'êng-yüeh T'ing** (Momien) ...	16	5365
27 & 28 „ ...	Halt		
29 „ „ ...	Mu-shui-ho	11	6300
30 „ „ ...	Shun-chiang	6	5950
1 December„ ...	La-hsing-kai	12¼	5850
2 „ „ ...	Ma-li-pa	7½	6000
3 to 5 „ ...	Halt		
6 „ „ ...	Hsiao-hsin-kai	11¾	6100
7 „ „ ...	Halt		
8 „ „ ...	**Kai-t'ou**	10¼	5350
9 „ „ ...	Wa-tien	8	5100
10 „ „ ...	Ch'ü-ch'ih	8¾	5100
11 „ „ ...	Hai-k'ou	10	5700
12 „ „ ...	Chiang-tso	13¼	5400
13 „ „ ...	**Kai-t'ou**	14	5350
14 „ „ ...	Shan-yao	11	6750
15 „ „ ...	Ssŭ-ling-kan	14	4400
16 „ „ ...	Mêng-ku	5½	2550
17 „ „ ...	Hsiang-ts'ai-tien	8	5200
18 „ „ ...	Ma-lu-t'ang	10	5850
19 „ „ ...	Êrh-tao-ch'iao	8	7100
20 „ „ ...	Shui-fu-ssŭ	12½	5650
21 „ „ ...	**Yung-ch'ang Fu**	6½	5500
22 „ „ ...	Halt		
23 „ „ ...	Ta-kuan-shih	8	6550
24 „ „ ...	Niu-wang	10	5100
25 „ „ ...	Shih-tien	13	5000
26 „ „ ...	Yao-kuan	10½	6000
27 „ „ ...	Kun-tou-shui	13¼	5200
28 „ „ ...	Mêng-po-lo	7	2300
29 „ „ ...	Ya-t'ang	11¾	5200
30 „ „ ...	Hsiao-shih-ch'iao	14¼	5100
31 „ „ ...	Mêng-p'êng	17	3500
1 January, 1899 ...	Mêng-tui	13½	3250
2 „ „ ...	Na-hsang	14¼	3550
3 „ „ ...	**Ma-li-pa** (Taw-nio)	8¼	3500
4 to 7 „ ...	Halt		
8 „ „ ...	Nawng-long...	16	3500
9 „ „ ...	**Kun-long**	12	1800
10 to 12 „ ...	Halt		
13 „ „ ...	Hung-tung-ling	13½	6200

Date	Place	Miles	Height in feet
14 January, 1899 ...	**Ma-li-pa**	14½	3500
15 to 29 „ ...	Halt		
30 „ „ ...	Na-hsang	8¼	3550
31 „ „ ...	Ch'üan-kang	14	2450
1 February „ ...	T'ou-tao-shui	6	5500
2 „ „ ...	Ts'ai-chia-chai	11	5800
3 „ „ ...	A-a-shan	7	6300
4 „ „ ...	Man-kang	9¾	5300
5 „ „ ...	**Chên-k'ang** (Möng Cheng) ...	13¾	2950
6 „ „ ...	Mêng-ti	9	2600
7 „ „ ...	Shan-kai	10	4650
8 „ „ ...	Hsi-la	8¼	3500
9 „ „ ...	Ta-li-ssŭ	14	5950
10 „ „ ...	Sung-shan	11¾	6300
11 „ „ ...	Pa-pao-shan...	9	6050
12 „ „ ...	**Yün Chou**	14	3800
13 & 14 „ ...	Halt		
15 „ „ ...	Mêng-lang	15	4150
16 „ „ ...	Hsin-ts'un	11	5700
17 „ „ ...	A-lo-kai	7	4150
18 „ „ ...	Hsiao-ch'in	10	4150
19 „ „ ...	Halt		
20 „ „ ...	Kung-lang	12½	5150
21 „ „ ...	Chi-lung	10	6500
22 „ „ ...	Miao-shan	11½	7650
23 „ „ ...	**Mêng-hua T'ing**	14¼	5950
24 „ „ ...	Hsün-chien	16¾	6250
25 „ „ ...	**Hsia-kuan**	12	6700
26 „ „ ...	**Ta-li Fu**	8	6700
27 & 28 „ ...	Halt		
1 March „ ...	**Chao Chou**	15½	6750
2 „ „ ...	Hung-ai	16½	5950
3 „ „ ...	Kou-ts'un-p'u	12½	6800
4 „ „ ...	Mu-pang-p'u	14	6775
5 „ „ ...	Halt		
6 „ „ ...	P'u-p'êng	12½	7125
7 „ „ ...	T'ien-shêng-t'ang	8¼	7700
8 „ „ ...	Ta-fu-ssŭ	6¼	6800
9 „ „ ...	**Chên-nan Chou**	16	6300
10 „ „ ...	Ta-shih-p'u	14½	6300
11 „ „ ...	**Ch'u-hsiung Fu**	7	6150
12 to 16 „ ...	Halt		
17 „ „ ...	Hsiao-yao-chan	9	6250
18 „ „ ...	**Kuang-t'ung Hsien**	10	6300
19 „ „ ...	Shê-tzŭ	13	6100
20 „ „ ...	Ta-tz'ŭ-ssŭ	11	6900
21 „ „ ...	Yao-chan-kai	6¼	5700
22 „ „ ...	Lu-p'iao-kai	11½	6500
23 „ „ ...	**An-ning Chou**	15½	6300
24 „ „ ...	**Yün-nan Fu**	19¼	6400
25 Mar. to 2 Apr. ...	Halt		
3 April „ ...	Ch'i-tien	18	7050
4 „ „ ...	**Yi-liang Hsien**	15½	5300
5 „ „ ...	Ta-shao	10	6600

Date	Place	Miles	Height in feet
6 April, 1899 ...	A-yu-p'u	17	6500
7 „ „ ...	**Lü-liang Chou**	12	6200
8 „ „ ...	Pan-ch'iao	9	6200
9 „ „ ...	Yüeh-chou	16	6300
10 „ „ ...	**Ch'ü-ching Fu**	15½	6450
11 „ „ ...	Chiu-lung-shan	13½	6700
12 „ „ ...	Lan-yen-p'u	17½	7225
13 „ „ ...	Pan-ch'iao	17	6800
14 „ „ ...	**Hsüan-wei Chou**	10	6850
15 „ „ ...	Halt		
16 „ „ ...	Chiu-p'u-tzŭ	18	6650
17 „ „ ...	Hsin-t'ien-p'u	9	7250
18 „ „ ...	Chan-p'o	10	6850
19 „ „ ...	Yao-chan	10	7050
20 „ „ ...	Halt		
21 „ „ ...	**Wei-ning Chou**	9	7500
22 „ „ ...	Ssŭ-p'u	13½	8000
23 „ „ ...	Hun-shui-t'ang	6	6600
24 & 25 „ ...	Back to **Wei-ning Chou**	19½	7500
26 „ „ ...	Halt		
27 „ „ ...	Shuang-lung-ch'iao	10½	7225
28 „ „ ...	Ch'ing-mo-ti	18½	6925
29 „ „ ...	Chia-hsi-ho	13	6100
30 „ „ ...	Kung-shan	11	8425
1 May „ ...	Ch'in-k'ou-t'ang	18½	7325
2 „ „ ...	**Tung-ch'uan Fu**	16	7250
3 „ „ ...	Ta-ch'iao	14	7550
4 „ „ ...	Shao-p'ai	11½	8100
5 „ „ ...	Lai-t'ou-p'o	12½	8500
6 „ „ ...	Hsiao-lung-t'an	18	7275
7 „ „ ...	Liu-shu-ho	12½	6825
8 „ „ ...	Yang-kai	21½	6350
9 „ „ ...	Shang-tui-lung	21	6500
10 „ „ ...	**Yün-nan Fu**	20	6400
11 to 14 „ ...	Halt		
15 „ „ ...	**Ch'êng-kung Hsien**	12½	6325
16 „ „ ...	Hua-lo-ts'un	19	6500
17 „ „ ...	Hai-mên-ch'iao	17	5900
18 „ „ ...	**T'ung-hai Hsien**	20	6200
19 „ „ ...	Kuan-yi	14¾	5000
20 „ „ ...	Hsin-fang	17	4900
21 „ „ ...	Mien-tien	14	4900
22 „ „ ...	Chi-kai	17½	4550
23 „ „ ...	**Mêng-tzŭ Hsien**	15	4725
24 „ „ ...	Halt		
25 „ „ ...	A-san-chai	6¼	5350
26 „ „ ...	Yao-t'ou	17	4100
27 „ „ ...	**Man-hao**	6½	650
	Thence down Red River by boat and steamer.		

FOURTH JOURNEY.

Date	Place	Miles	Height in feet
	From **Myitkyina**		500
15 November, 1899...	Nam-long	7½	500
16 „ „ ...	Kazu	11½	500
17 „ „ ...	Nkrang	11½	3675
18 „ „ ...	**Sima**	7	4525
19 „ „ ...	Shi-raw-kawng	9½	3950
20 „ „ ...	Mêng-lung	13	5900
21 „ „ ...	Ho-pyek	13½	2750
22 „ „ ...	Na-hseng	14	2800
23 „ „ ...	Tiao-kang	13	3500
24 „ „ ...	Nang-sung-kuan	13	3600
25 „ „ ...	**T'êng-yüeh T'ing** (Momien) ...	16	5365
26 „ „ ...	Halt		
27 „ „ ...	Back to Nang-sung-kuan	16	3600
28 „ „ ...	Chai-t'ang	8¾	6800
29 „ „ ...	Shan-tung	9½	4800
30 „ „ ...	Man-p'a	12½	4650
1 December ...	**Lung-ling T'ing**	11	5200
2 „ „ ...	Mêng-mao	9½	6400
3 „ „ ...	Pai-ta	17½	4650
4 „ „ ...	Ma-lu-t'ang	8¾	4600
5 „ „ ...	Yao-kuan	15	6000
6 „ „ ...	Wan-tien	12¼	2400
7 „ „ ...	Kan-kou	11½	6100
8 „ „ ...	Ta-mêng-t'ung (Old)	13¾	3700
9 „ „ ...	Li-pa-sa	14½	6200
10 „ „ ...	Li-ma-hsi	19¼	4800
11 „ „ ...	**Yün Chou**	16½	3800
12 „ „ ...	Halt		
13 „ „ ...	Hsiao-chu-ching	12½	6150
14 „ „ ...	Pan-ho	13¼	5250
15 „ „ ...	Chiang-chia-p'u	13¾	5650
16 „ „ ...	Pang-tung-kai	10½	4950
17 „ „ ...	T'uan-shan	8¾	3750
18 „ „ ...	Pai-yin-ch'in	10¾	6150
19 „ „ ...	Hou-yao (in Ching-ku plain) ...	12½	4650
20 „ „ ...	Lung-t'ang-kai	11	4550
21 „ „ ...	**Wei-yüan T'ing**	14	3150
22 „ „ ...	P'ing-chai	14	3350
23 „ „ ...	Têng-t'ung	16	4000
24 „ „ ...	Pa-t'ou	13½	6400
25 „ „ ...	**Hsin-fu**	11½	3400
26 „ „ ...	Man-lien	11½	3350
27 „ „ ...	Man-pieh	13¼	4500
28 „ „ ...	Mo-po	11¼	4400
29 „ „ ...	Mo-hei	13¾	4150
30 „ „ ...	**P'u-êrh Fu**	12	4500
31 Dec. & 1 Jan. 1900	Halt		
2 January „ ...	Back to Mo-hei	12	4150
3 „ „ ...	Hsia-pa-pien	15	3150
4 „ „ ...	T'ung-kuan	9½	5200

Date	Place	Miles	Height in feet
5 January, 1900 ...	Chang-lu-p'ing	13¼	3300
6 „ „ ...	**T'a-lang T'ing**	15½	4600
7 „ „ ...	Yi-wan-shui	12¼	5600
8 „ „ ...	Ma-lu-t'ang	12¼	6950
9 „ „ ...	A-ku-lu	13	5100
10 „ „ ...	Ta-t'ien-fang	11	1700
11 „ „ ...	Chiu-ti-mo	7½	5100
12 „ „ ...	**Hsin-p'ing Hsien**	16	5425
13 „ „ ...	Hsin-kai	10¼	5300
14 „ „ ...	Hu-lu-p'êng	12	6500
15 „ „ ...	Ssŭ-ch'êng	9½	6000
16 „ „ ...	P'u-pei	18	5400
17 „ „ ...	**Yi-mên Hsien**	4¾	5350
18 to 20 „ ...	Halt		
21 „ „ ...	Hsiao-lung-t'ang	18½	6600
22 „ „ ...	**An-ning Chou**	18	6300
23 „ „ ...	**Yün-nan Fu**	19¼	6400
24 to 28 „ ...	Halt		
29 „ „ ...	Êrh-ts'un	14½	6200
30 „ „ ...	Chê-pei	18¼	5900
31 „ „ ...	**Wu-ting Chou**	17	6000
1 February „ ...	Halt		
2 „ „ ...	Hsiao-ts'ang	17½	6000
3 „ „ ...	Chiu-ts'un	9½	5800
4 „ „ ...	Ch'ien-ch'ang	21	5600
5 „ „ ...	Ts'u-chü	8½	7700
6 „ „ ...	San-ying-p'an	16	7900
7 „ „ ...	Chiao-hsi	14¾	7800
8 „ „ ...	K'a-hsi	16	7800
9 „ „ ...	Ta-p'ing-ti	13¾	3950
10 „ „ ...	Ta-shih-p'êng	11¾	8800
11 „ „ ...	Pai-tzŭ-t'ien	8	7000
12 „ „ ...	Suan-shui-ho	10	6350
13 „ „ ...	Chang-kuan-ch'ung	15	6200
14 „ „ ...	**Hui-li Chou**	13½	6300
15 „ „ ...	Pai-kuo-wan	19¼	7000
16 „ „ ...	Mo-so-ying	13	4800
17 „ „ ...	T'ieh-chiang-fang	17½	4400
18 „ „ ...	Liang-lu-k'ou	19¼	4700
19 „ „ ...	Huang-shui-t'ang	13¼	4950
20 „ „ ...	Ma-tao-tzŭ	19¼	4950
21 „ „ ...	Li-chou	20	5400
22 „ „ ...	Lu-ku	18½	5600
23 „ „ ...	Têng-hsiang-ying	19	7850
24 „ „ ...	Hsiao-shao	10¾	6900
25 „ „ ...	**Yüeh-hsi T'ing**	10¼	6100
26 & 27 „ ...	Halt		
28 Feb. to 2 Mar. ...	Back to Lu-ku	40	5600
3 March „ ...	**Mien-ning Hsien**	20	6200
4 „ „ ...	Ha-ha-hsün	9½	7400
5 „ „ ...	Ma-t'ou-shan	8	7600
6 „ „ ...	Lu-ning-ying	15½	6700
7 „ „ ...	Halt		
8 „ „ ...	Chieh-hsing	9½	7400

Date	Place	Miles	Height in feet
9 March, 1900 ...	Hua-k'an	10¾	8100
10 „ „ ...	No-po	10½	6850
11 „ „ ...	Mo-tzŭ-kou	6¾	7450
12 „ „ ...	Ma-huang-kou	10	10300
13 „ „ ...	Mo-lien	9¾	10600
14 „ „ ...	San-ko-ya (Lower)	11¾	6850
15 „ „ ...	Pê-tiao	3	7400
16 „ „ ...	Camp west of Pa-êrh	11¼	11800
17 „ „ ...	K'u-lu	14½	12500
18 „ „ ...	A-pê-ti	15	8900
19 „ „ ...	**Mi-li**	20¼	9500
20 „ „ ...	Camp in forest	9	11800
21 „ „ ...	Camp at hut	15¾	14600
22 „ „ ...	Lei-lung	12	7050
23 „ „ ...	Tzŭ-lo	11¾	9500
24 „ „ ...	Camp near Wei-jih	15	8500
25 „ „ ...	Camp near Ran-da	13¼	13750
26 „ „ ...	Ming-yu-ho	9	9600
27 „ „ ...	Ta-lung	14¼	12300
28 „ „ ...	**Chung-tien**	19¼	11500
29 „ „ ...	T'an-tui	18¾	10200
30 „ „ ...	Hsien-to	18	7600
31 „ „ ...	Pang-tzŭ-la	12¼	7250
1 April „ ...	Pê-kê	13¼	10500
2 „ „ ...	Camp in forest	6½	14200
3 „ „ ...	Camp	13	13800
4 „ „ ...	**A-tun-tzŭ**	8¾	11500
5 to 10 „ ...	Halt		
11 „ „ ...	Chia-pieh	13½	8000
12 „ „ ...	Yang-tsa	10½	7000
13 „ „ ...	Londre	8¼	7800
14 „ „ ...	Camp in forest	5½	10000
15 „ „ ...	On and back to same camp ...	3½	10000
16 „ „ ...	Back to Londre	5½	7800
17 to 19 „ ...	Back to **A-tun-tzŭ**	33¾	11500
20 to 22 „ ...	Halt		
23 „ „ ...	Liu-t'ou-chiang	13½	7800
24 „ „ ...	Chiung-pu	12¼	10100
25 „ „ ...	Na-pu	13¼	8000
26 „ „ ...	Pa-mien	9	9300
27 „ „ ...	Pa-yung-ko	12½	11500
28 „ „ ...	**Ya-k'a-lo**	10¼	9500
29 „ „ ...	Halt		
30 „ „ ...	La-ta-ting	6½	12200
1 May „ ...	Up pass and back to La-ta-ting ...	7	
2 „ „ ...	Ya-k'a-lo and back to La-ta-ting ...	13	
3 „ „ ...	Hnga-tsa	14¼	12200
4 „ „ ...	Chia-ni-ting	14	13500
5 „ „ ...	Pa-mu-t'ang	9¾	13200
6 „ „ ...	Te-ga-ting	15½	10200
7 „ „ ...	Chu-pa-lung	12¼	9000
8 „ „ ...	**Ba-t'ang**	19½	9400
9 to 11 „ ...	Halt		
12 to 18 „ ...	Back to La-ta-ting	85¼	12200

Date	Place	Miles	Height in feet
19 May, 1900 ...	Gönra rope bridge	8	8400
20 „ „ ...	**Ya-k'a-lo**	3½	9400
21 „ „ ...	Camp beyond La-ta-ting	7¾	13500
22 „ „ ...	Hnga-tsa	13	12200
23 „ „ ...	Bo-tsa	9¾	11300
24 „ „ ...	Camp in snow	11	14100
25 „ „ ...	Ya-ra-no	5	11000
26 „ „ ...	Go-nia ferry	8¾	8600
27 „ „ ...	Camp in forest	9	12800
28 „ „ ...	Ruian-dzong-tza	14½	10200
29 „ „ ...	Ya-ra-gong	13¼	11900
30 & 31 „ ...	Halt		
1 June „ ...	Shepherd's hut	9½	12000
2 „ „ ...	Den-bo-nong	12	10200
3 „ „ ...	Camp on high range	11¾	15300
4 „ „ ...	Camp under rock	10¼	13800
5 „ „ ...	Chong-tsa-gong	12½	11600
6 „ „ ...	Ra-nong	15	12800
7 „ „ ...	Ndzon-dza	14	15000
8 „ „ ...	T'ou-t'ang	8¾	15000
9 „ „ ...	**Li-t'ang**	13½	13800
10 „ „ ...	Halt		
11 „ „ ...	Ho-ch'u-k'a	15	13300
12 „ „ ...	Tsa-ma-la-t'ung	14½	13300
13 „ „ ...	Hsi-ngo-lo	7½	12000
14 „ „ ...	Ma-kê-tsung	16½	12000
15 „ „ ...	Ho-k'ou	8	9400
16 „ „ ...	Wo-lung-shih	20	13400
17 „ „ ...	Tung-ngo-lo	15	12050
18 „ „ ...	A-niang-pa	15	12500
19 „ „ ...	Chê-to	19½	11300
20 „ „ ...	**Ta-chien-lu**	9	8400
21 „ „ ...	Wa-ssŭ-kou	16½	5300
22 „ „ ...	Lu-ting-ch'iao	16¼	4850
23 „ „ ...	Ming-kan-shan	14½	6700
24 „ „ ...	Chu-shih-p'ing	16½	4000
25 „ „ ...	**T'ien-ch'üan Chou**	20¼	3000
26 „ „ ...	**Ya-chou Fu**	20½	2500
	Thence by raft down Ya River to Chia-ting Fu. By boat to I-chang, and steamer thence to Shanghai, arriving 19 July		

SUMMARY OF DISTANCES

1st journey	139	miles
2nd „	1313¼	„
3rd „	1659¾	„
4th „	2441	„
Total distance travelled by road	5553	miles

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